Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

6/20/2012

Thomas Bowker
COL-PUMP COMPANY, INC.
131 EAST RAILROAD ST
Columbiana, OH 44408

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0215010001
Permit Number: P0108012
Permit Type: Renewal
County: Columbiana

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to “Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General’s Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page,www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-NEDO

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
COL-PUMP COMPANY, INC.

Facility ID:	0215010001
Permit Number:	P0108012
Permit Type:	Renewal
Issued:	6/20/2012
Effective:	6/20/2012
Expiration:	6/20/2017

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
COL-PUMP COMPANY, INC.

Table of Contents

Authorization 1

A. Standard Terms and Conditions 3

1. What does this permit-to-install and operate ("PTIO") allow me to do? 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them? 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator? 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7

B. Facility-Wide Terms and Conditions 8

C. Emissions Unit Terms and Conditions 11

1. F007, Sand Handling 12
2. F008, Shakeout 21
3. F009, Pouring and Cooling 29
4. K001, Dip Tanks #1 35
5. K002, Dip Tank #2 41
6. P003, Wheelabrator Shotblast 45
7. P005, Pangborn Tumblast 52
8. P901, Cupola #1 59
9. P902, Cupola #2 70

Authorization

Facility ID: 0215010001
Application Number(s): A0041712
Permit Number: P0108012
Permit Description: Renewal of the Federally Enforceable Permit to Install and Operate for a gray iron foundry which includes the following emissions units: 2 cupolas, sand handling, shakeout, pouring and cooling, Wheelabratorshotblasting, Tumblast shot blasting, and dip tanks. Includes an administrative modification to remove daily recordkeeping requirements for the dip tanks and include more detailed monthly requirements.
Permit Type: Renewal
Permit Fee: $0.00
Issue Date: 6/20/2012
Effective Date: 6/20/2012
Expiration Date: 6/20/2017
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

COL-PUMP COMPANY, INC.
131 EAST RAILROAD ST
Columbiana, OH 44408

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s))listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108012
Permit Description: Renewal of the Federally Enforceable Permit to Install and Operate for a gray iron foundry which includes the following emissions units: 2 cupolas, sand handling, shakeout, pouring and cooling, Wheelabratorshotblasting, Tumblast shot blasting, and dip tanks. Includes an administrative modification to remove daily recordkeeping requirements for the dip tanks and include more detailed monthly requirements.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**F007**
Company Equipment ID:	Sand Handling
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F008**
Company Equipment ID:	Shakeout
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F009**
Company Equipment ID:	Pouring and Cooling
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**K001**
Company Equipment ID:	Dip Tanks #1
Superseded Permit Number:	P0084316
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**K002**
Company Equipment ID:	Dip Tank #2
Superseded Permit Number:	P0084316
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	WheelabratorShotblast
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	PangbornTumblast
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	Cupola #1
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P902**
Company Equipment ID:	Cupola #2
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement.Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is takenby Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

[1]Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. 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).

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

      (1) None.

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

      (1) B.2, B.3, B.4, B.5 and B.6

2. The emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from all emissions units at this facility shall not exceed 9.9 tons/year for any individual HAP and 24.9 tons/year for total combined HAPs, as rolling, 12-month summations.

3. The permittee shall collect and record the following information each month on a facility-wide basis, for all emissions units at the facility:

   a) the total emissions of each individual HAP and total combined HAPs, in pounds per month; and

   b) the rolling, 12-month summation of emissions of each individual HAP and total combined HAPs, in tons.

4. The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

   a) an identification of each rolling, 12-month period during which emissions of HAPs from all emissions units at the plant exceeded 9.9 tpy for each individual HAP; and

   b) an identification of each rolling, 12-month period during which emissions of HAPs from all emissions units at the plant exceeded 24.9 tpy for total combined HAPs;

   The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

   If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

5. The permittee shall submit annual reports that summarize the following information:

   a) the total actual annual individual HAP emissions for the entire facility, in tons; and

   b) the total actual annual combined HAPs emissions for the entire facility, in tons.

These reports shall be submitted by April 15 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

6. Compliance with the emission limitations in B.2 above shall be determined in accordance with the following methods:

   a) Emission Limitations:

   Facility-wide individual HAP emissions shall not exceed 9.9 tons per rolling, 12-month period.

   Facility-wide total combined HAP emissions shall not exceed 24.9 tons per rolling, 12-month period.

   Applicable Compliance Method:

   Compliance with the annual HAP emissions limitations is based on the record keeping requirements specified in B.3.

7. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZZ, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources. Although Ohio EPA has determined that this area source MACT (also known as the GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

C. Emissions Unit Terms and Conditions

1. F007, Sand Handling

Operations, Property and/or Equipment Description:

Sand handling and mold making

a) 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. b)(1)e, c)(1), c)(2), c)(3), d)(1), d)(2), e)(1)a, e)(1)b, e)(1)c, f)(1)d, f)(1)e and f)(1)f

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack of the wet scrubber and from the stack of the baghouse shall not exceed 20% opacity, as a 6-minute average, accept as provided in the rule. See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)a.
d.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the muller scrubber stack shall not exceed 14.21 pounds per hour. PE from the fresh sand addition baghouse stack shall not exceed 3.21 pounds per hour.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-31-05(D)(1)(b)	Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 1.69 tons per rolling, 12-month period.

(2) Additional Terms and Conditions

a. Except as otherwise specified in paragraphs (A)(2) and (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the stack may exceed 20% opacity, as a 6-minute average for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60% opacity, as a 6-minute average, at any time.

b. Reasonably available control measures (RACM) shall be employed to minimize fugitive particulate emissions. RACM shall include, but not be limited to, containing operations within the building, maintaining the fabric filter and scrubber in good operating condition, and using good engineering practices.

c) Operational Restrictions

(1) The annual operating hours for this emissions unit shall not exceed 5,000 hours, based upon a rolling, 12-month summation of the operating hours.

(2) The production rate of the muller shall not exceed 39.6 tons per hour.

(3) The production rate of the fresh sand addition shall not exceed 3.96 tons per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the operating hours for each month;

b. the rolling, 12-month summation of the operating hours;

c. the amount of sand mixed in the muller, in tons, during each month;

d. the rolling, 12-month summation of sand mixed in the muller, in tons;

e. the average production rate of the muller, in tons per hour, during each month, calculated by dividing (c) by (a);

f. the rolling, 12-month average production rate of the muller, in tons per hour, calculated by dividing (d) by (b);

g. the amount of fresh sand added, in tons, during each month;

h. the rolling, 12-month summation of fresh sand added, in tons;

i. the average production rate of the fresh sand addition, in tons per hour, during each month, calculated by dividing (g) by (a); and

j. the rolling, 12-month average production rate of the fresh sand addition, in tons per hour, calculated by dividing (h) by (b)

(2) The permittee shall record each month the rolling, 12-month PM_{10} emissions rate, in tons, for this emissions unit, as calculated by the following equation:

E = PM_{10} emissions from muller/scrubber stack or [EF x P x H x ton/2,000 lbs] + PM_{10} emissions from fresh sand addition/baghouse stack or [EF x P x H x ton/2,000 lbs]

where:

E = total rolling, 12-month PM_{10} emissions rate, in tons;

EF = emission factor for controlled PM_{10} is 0.01196 lb PM_{10}/ton metal* for the scrubber stack, and 0.052 lb PM_{10}/ton metal** for the baghouse stack;

P = the rolling, 12-month average production rate, in tons per hour, for the muller is recorded in section d)(1)f, and the rolling, 12-month average production rate of the fresh sand addition is recorded in section d)(1)j; and

H = the rolling, 12-month summation of the operating hours, as recorded in section d)(1)b.

Emission Factor of 0.046 lb PE/ton sand handled, with scrubber, is from AP-42 Table 12.10-7 (1/95). Emission Factor of 0.20 lb PE/ton sand handled, with baghouse, is from AP-42 Table 12.10-7 (1/95). No Emission Factor found for PM_{10}. However, Table A-1 of AP-42 (2/72) provides a percentage distribution by size of particles from selected sources without control equipment. PM_{10} emissions from a "gray iron foundry" are reported at 26%. Assumption is made that we can use reported proportions (26% < 10 microns, 74% > 10 microns) and apply to proportions of controlled emissions.

Calculation:

* EF for scrubber = 26% of 0.046 lb PE/ton metal = 0.01196 lb PM_{10}/ton metal.

** EF for baghouse = 26% of 0.20 lb PE/ton metal = 0.052 lb PM_{10}/ton metal.

(3) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from each stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(4) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse and the water level of the scrubber, in inches of water below the full mark during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a daily basis and the water level of the scrubber, in inches of water below the full mark, twice per shift (or at least twice every 8 hours) for each day the emissions unit is in operation.

Whenever the monitored value for the pressure drop and/or the scrubber water level deviates from the range/value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings and the scrubber water value immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 6.0 inches of water.

The scrubber water level shall be kept above 10 inches below the full mark while this emissions unit is in operation.

This range/value is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range/value based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range/value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(5) The permittee shall record the downtime for the scrubber equipment, when this emissions unit is in operation.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. the month when the rolling, 12-month summation of the operating hours for this emissions unit exceeded 5,000 hours;

b. the month when the average production rate for the muller exceeded 39.6 tons per hour, and when the average production rate for the fresh sand addition exceeded 3.96 tons per hour; and

c. the month when the total PM_{10} emissions rate exceeded 1.69 tons per rolling, 12-month period.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse field and/or the scrubber water level was outside of the acceptable range/value;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop and/or the scrubber water level into compliance with the acceptable range/value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack serving the muller/scrubber, and from the stack serving the fresh sand addition/baghouse shall not exceed twenty percent opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance with the above visible particulate emission limitation shall be demonstrated based upon visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the above fugitive visible particulate emission limitation shall be demonstrated based upon fugitive visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitations:

PE from the muller scrubber stack shall not exceed 14.21 pounds per hour.

PE from the fresh sand addition baghouse stack shall not exceed 3.21 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall conduct, or have conducted, particulate emission testing at the outlet of each stack serving this emissions unit to demonstrate compliance with the particulate emission limitations in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

d. Emission Limitation:

PM_{10} emissions from this emissions unit shall not exceed 1.69 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(2).

e. Operational Restriction:

The annual operating hours for this emissions unit shall not exceed 5,000 hours, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)b.

f. Operational Restrictions:

The production rate of the muller shall not exceed 39.6 tons per hour.

The production rate of the fresh sand addition shall not exceed 3.96 tons per hour.

Applicable Compliance Method:

Compliance with the above operational restrictions shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(1)e and d)(1)i.

g. Operational Restriction:

The scrubber water level shall be kept above 10 inches below the full mark while this emissions unit is in operation.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(4).

h. Operational Restriction:

The acceptable range for the pressure drop across the baghouse is 1.0 to 6.0 inches of water.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(4).

(2) Reasonably Available Control Measures required by OAC rule 3745-17-08(B) that are employed for this emissions unit shall be considered adequate if compliance with the visible particulate emissions limitation contained in OAC rule 3745-17-07 is achieved.

g) Miscellaneous Requirements

(1) None.

2. F008, Shakeout

Operations, Property and/or Equipment Description:

Two shakeout units, upper and lower.

a) 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. b)(1)e, c)(1), d)(1)a, d)(1)b, d)(2), d)(3), e)(1)a, e)(1)b, f)(1)d, f)(1)e and f)(1)f

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, accept as provided by the rule. See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 3.47 pounds per hour.
e.	OAC rule 3745-31-05(D)(1)(b)	Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 2.79 tons per rolling, 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Volatile organic compound (VOC) emissions from this emissions unit shall not exceed 18.67 tons per rolling, 12-month period.

(2) Additional Terms and Conditions

a. Except as otherwise specified in paragraphs (A)(2) and (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the stack may exceed 20% opacity, as a 6-minute average for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60% opacity, as a 6-minute average, at any time.

b. Reasonably available control measures (RACM) shall be employed to minimize fugitive particulate emissions. RACM shall include, but not be limited to, maintaining an adequate draft into the hood that directs the exhaust to a baghouse. The system shall provide an overall particulate control efficiency of 84% (85% capture efficiency and 99% control efficiency). The permittee shall check the position of the dampers daily to assure that the draft is sufficient to adequately capture emissions.

c) Operational Restrictions

(1) The annual operating hours for this emissions unit shall not exceed 3,100 hours, based upon a rolling, 12-month summation of the operating hours.

(2) The production rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the operating hours for each month;

b. the rolling, 12-month summation of the operating hours;

c. the amount of metal (castings), in tons, shaken during each month;

d. the rolling, 12-month summation of metal (castings) shaken, in tons;

e. the average production rate of this emissions unit, in tons per hour, during each month, calculated by dividing (c) by (a); and

f. the rolling, 12-month average production rate of this emissions unit, in tons per hour, calculated by dividing (d) by (b).

(2) The permittee shall record each month the rolling, 12-month PM_{10} emissions rate, in tons, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs x (1 - CE)

where:

E = emissions rate, in tons per rolling, 12-month period;

EF = emission factor for PM_{10} is 2.24 lbs PM_{10}/ton metal*;

P = the rolling, 12-month average production rate of this emissions unit, in tons of metal per hour, as recorded in d)(1)f;

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b; and

CE = overall control efficiency of capture equipment and baghouse, expressed as a decimal, is 0.84.

* Emission Factor of 2.24 lbs PM_{10}/ton metal is from AP-42 Table 12.10-9 (1/95), (shakeout uncontrolled).

(3) The permittee shall record each month the rolling, 12-month VOC emissions rate, in tons, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs

where:

E = emissions rate, in tons per rolling, 12-month period;

EF = emission factor for VOC is 2.4 lbs VOC/ton metal*;

P = the rolling, 12-month average production rate of this emissions unit, in tons of metal per hour, as recorded in d)(1)f; and

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b.

* Derivation of Emission Factor. 6:1 is the sand:metal ratio. 4% seacoal in green sand. Assume 1% burnout rate. 50% of burnout is VOC. (6 tons sand/1 ton metal)(0.04)(0.01)(0.50)(2,000 lbs/1 ton) = 2.4 lbs VOC /ton of metal.

(4) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(5) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 6.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(6) The permittee shall conduct daily inspections of the dampers to the baghouse to ensure adequate capture and operation of the baghouse. The inspection findings, and any subsequent maintenance task performed, shall be entered into a maintenance log.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. the month when the rolling, 12-month summation of the operating hours exceeded 3,100 hours;

b. the month when the PM_{10} and/or VOC emissions rate exceeded the respective tons per rolling, 12-month period emission limitation; and

c. the month when the average production rate for this emissions unit exceeded 5.02 tons of metal per hour.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, accept as provided by the rule.

Applicable Compliance Method:

If required, compliance with the above visible particulate emission limitation shall be demonstrated based upon visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the above fugitive visible particulate emission limitation shall be demonstrated based upon fugitive visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitation:

PE from this emissions unit shall not exceed 3.47 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall conduct, or have conducted, particulate emission testing at the outlet of the stack serving this emissions unit to demonstrate compliance with the particulate emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

d. Emission Limitation:

PM_{10} emissions from this emissions unit shall not exceed 2.79 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(2).

e. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 18.67 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(3).

f. Operational Restriction:

The annual operating hours for this emissions unit shall not exceed 3,100 hours, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1).

g. Operational Restriction:

The production rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)e.

h. Operational Restriction:

The acceptable range for the pressure drop across the baghouse is 1.0 to 6.0 inches of water.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(5).

(2) Reasonably Available Control Measures required by OAC rule 3745-17-08(B) that are employed for this emissions unit shall be considered adequate if compliance with the visible particulate emissions limitation contained in OAC rule 3745-17-07 is achieved.

g) Miscellaneous Requirements

(1) None.

3. F009, Pouring and Cooling

Operations, Property and/or Equipment Description:

Pouring and cooling

a) 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. b)(1)c, c)(1), c)(2), d)(1), d)(2), d)(3), d)(4), e)(1), f)(1)b, f)(1)c, f)(1)d, f)(1)e and f)(1)f.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(1)	Fugitive visible particulate emissions shall not exceed 20% opacity as a 3-minute average.
b.	OAC rule 3745-17-08(B)(3)	See b)(2)a.
c.	OAC rule 3745-31-05(D)(1)(b)	Carbon monoxide (CO) emissions shall not exceed 18.67 tons per rolling, 12-month period. Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 18.67 tons per rolling, 12-month period. Volatile organic compound (VOC) emissions shall not exceed 18.67 tons per rolling, 12-month period.

(2) Additional Terms and Conditions

a. Reasonably available control measures (RACM) shall be employed to minimize fugitive particulate emissions. RACM shall include, but not be limited to, containing operations within the building and using good engineering practices.

c) Operational Restrictions

(1) The annual operating hours for this emissions unit shall not exceed 3,100 hours based upon a rolling, 12-month summation of the operating hours.

(2) The pouring rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the operating hours for each month;

b. the rolling, 12-month summation of the operating hours;

c. the amount of metal poured, in tons, during each month;

d. the rolling, 12-month summation of metal poured, in tons;

e. the average pouring rate of this emissions unit, in tons of metal per hour, during each month, calculated by dividing (c) by (a); and

f. the rolling, 12-month average pouring rate of this emissions unit, in tons of metal per hour, calculated by dividing (d) by (b).

(2) The permittee shall record each month the CO emissions rate in tons per rolling, 12-month period, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs

where:

E = emissions rate, in tons per rolling, 12-month period;

EF = emission factor for CO is 2.4 lbs CO/ton metal poured *;

P = the average pouring rate, in tons of metal per hour, as recorded in d)(1)f; and

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b.

* Derivation of Emission Factor. 6:1 is the sand:metal ratio. 4% seacoal in green sand. Assume 1% burnout rate. 50% of burnout is CO. (6 tons sand/1 ton metal)(0.04)(0.01)(0.50)(2,000 lbs/1 ton) = 2.4 lbs CO /ton of metal.

(3) The permittee shall record each month the VOC emissions rate in tons per rolling, 12-month period, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs

where:

E = emissions rate, in tons per rolling, 12-month period;

EF = emission factor for VOC is 2.4 lbs VOC/ton metal poured *;

P = the average pouring rate, in tons metal per hour, as recorded in d)(1)f; and

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b.

* Derivation of Emission Factor. 6:1 is the sand:metal ratio. 4% seacoal in green sand. Assume 1% burnout rate. 50% of burnout is VOC. (6 tons sand/1 ton metal)(0.04)(0.01)(0.50)(2,000 lbs/1 ton) = 2.4 lbs VOC /ton of metal.

(4) The permittee shall record each month the PM_{10} emissions rate in tons per rolling, 12-month period, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs

where:

E = emissions rate, in tons per rolling, 12-month period;

EF = emission factor for PM_{10} is 2.4 lbs PM_{10}/ton metal poured *;

P = the average pouring rate, in tons metal per hour, as recorded in d)(1)f; and

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b.

* Derivation of Emission Factor. Emission factor for PM is 4.2 lbs PM/ton metal from AP-42 Table 12.10-7 (1/95), (pouring/uncontrolled for PM). A fugitive dust emission factor of 0.7 lbs PM/ton from RACM Table 2.7-1 (alloying in the ladle) is added for a total of 4.9 lbs PM/ton metal. Based on AP-42 Table 12.10-9 (1/95) 49% of PM is PM_{10}. (0.49)(4.9 lbs PM/ton metal) = 2.4 lbs PM_{10}/ton metal.

(5) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. the month when the rolling, 12-month summation of operating hours exceeded 3,100 hours;

b. the month when the CO, PM_{10} and/or VOC emissions rate exceeded the respective tons per rolling, 12-month period emissions limitation; and

c. the month when the average pouring rate exceeded 5.02 tons metal per hour.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit.

The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the above fugitive visible particulate emission limitation shall be demonstrated based upon fugitive visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

CO emissions shall not exceed 18.67 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(2).

c. Emission Limitation:

VOC emissions shall not exceed 18.67 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(3).

d. Emission Limitation:

PM_{10} emissions shall not exceed 18.67 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(4).

e. Operational Restriction:

The annual operating hours for this emissions unit shall not exceed 3,100 hours based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1).

f. Operational Restriction:

The pouring rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)e.

(2) Reasonably Available Control Measures required by OAC rule 3745-17-08(B) that are employed for this emissions unit shall be considered adequate if compliance with the visible particulate emissions limitation contained in OAC rule 3745-17-07 is achieved.

g) Miscellaneous Requirements

(1) None.

4. K001, Dip Tanks #1

Operations, Property and/or Equipment Description:

Three casting paint dip tanks.

a) 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. d)(2), d)(3) d)(4) and e)(4)

(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. b)(1)c, c)(1), c)(4), d)(2)b, d)(2)c, f)(1)c, f)(1)d and f)(1)e

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 02-20438)	Volatile organic compounds (VOC) emissions shall not exceed 210 pounds per day. See b)(2)a.
b.	OAC rule 3745-21-09(U)(1)(d)	The VOC content shall not exceed 3.5 pounds per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.
c.	OAC rule 3745-31-05(D)(1)(b)	VOC emissions shall not exceed 15.75 tons per rolling, 12-month period.
d.	40 CFR Part 63, Subpart MMMM	See b)(2)b.

(2) Additional Terms and Conditions

a. The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(U)(1)(d) and 3745-31-05(D)(1)(b).

b. This emissions unit is not subject to 40 CFR Part 63, Subpart MMMM (MACT for Surface Coating of Miscellaneous Metal Parts). Section 63.3881(c)(1) of this subpart states that this subpart does not apply to a coating operation conducted at a facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to section 63.3941. The Material Safety Data Sheet provided in the application for the coating used in this emissions unit does not include any HAP. If future coatings contain HAP and if the facility is a major source, or is part of a major source of HAP emissions, then this subpart would be applicable per Section 63.3881(b).

c) Operational Restrictions

(1) The coating usage shall not exceed 9,000 gallons per rolling, 12-month period.

(2) The permittee shall cover the dip tanks in order to reduce VOC emissions when this emissions unit is not actively in use.

(3) The exhaust fan above one dip tank shall operate at 4,000 cubic feet per minute and shall operate at all times when this emissions unit is in operation.

(4) The coating usage rate shall not exceed 2.5 gallons per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the name and identification number of each coating employed;

b. the VOC content, excluding water and exempt solvents, in pounds per gallon, of each coating employed;

c. the number of gallons of each coating employed;

d. the number of hours the emissions unit was in operation;

e. the number of days the emissions unit was in operation;

f. the total VOC emissions from all coatings employed, in pounds per month (b. times c.);

g. the average daily emission rate, in pounds per day (f. divided by e.);

h. the average hourly coating usage, in gallons per hour (c. divided by d.);

i. the rolling, 12-month summation of coatings employed, in gallons; and

j. the rolling 12-month VOC emissions, in tons, as calculated by the summation of monthly VOC emissions, multiplied by ton/2,000 lbs;

(2) The permit to install for this emissions unit [K001] was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: 2-Butoxyethanol

Maximum Hourly Emission Rate: 3.237 pounds per hour

TLV: 96,662.58 ug/m3

MAGLC = TLV/42 = 2,301.5 ug/m3

Predicted 1-Hour Maximum Ground-Level Concentration: 1,225.5 ug/m3

(3) Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

(4) If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy":

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

e) Reporting Requirements

(1) The permittee shall notify the Ohio EPA Northeast District Office in writing of any daily record showing use of noncomplying coatings, i.e., coatings exceeding 3.5 pounds VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office within 30 days following the end of the calendar month.

(2) The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:

a. an identification of each day during which the VOC emissions were calculated to exceed 210 pounds per day;

b. an identification of each day during which the average hourly coating usage rate exceeded 2.5 gallons per hour;

c. an identification of each day during which VOC content of the coating exceeded 3.5 pounds per gallon;

d. an identification of each month during which the cumulative volume of coatings employed during the past rolling, 12-month period exceeded 9,000 gallons; and

e. an identification of each month during which the rolling, 12-month VOC emissions were greater than 15.75 tons.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual PER. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

The VOC content shall not exceed 3.5 pounds per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

<u>Applicable Compliance Method</u>:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1). Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings.

b. <u>Emission Limitation</u>:

VOC emissions shall not exceed 210 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

c. Emission Limitation:

VOC emissions shall not exceed 15.75 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

d. Operational Restriction:

The coating usage shall not exceed 9,000 gallons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

e. Operational Restriction:

The coating usage rate shall not exceed 2.5 gallons per hour.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

(1) None.

5. K002, Dip Tank #2

Operations, Property and/or Equipment Description:

Casting yellow paint dip tank.

a) 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. b)(2)c, c)(1), d)(2)b, d)(2)c, f)(1)c and f)(1)d

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), (PTI 02-21767)	See b)(2)a, b)(2)b, b)(2)c and b)(2)d.
b.	OAC rule 3745-21-09(U)(1)(d)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-31-05(D)(1)(b)	See b)(2)c.
d.	40 CFR Part 63, Subpart MMMM	See b)(2)d.

(2) Additional Terms and Conditions

a. The volatile organic compound (VOC) content shall not exceed 0.6 pound per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

b. VOC emissions shall not exceed 2.9 pounds per day.

c. VOC emissions shall not exceed 0.54 ton per rolling, 12-month period.

d. This emissions unit is not subject to 40 CFR Part 63, Subpart MMMM (MACT for Surface Coating of Miscellaneous Metal Parts). Section 63.3881(c)(1) of this subpart states that this subpart does not apply to a coating operation conducted at a facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to section 63.3941. The Material Safety Data Sheet provided in the application for the coating used in this emissions unit does not include any HAP. If future coatings contain HAP and if the facility is a major source, or is part of a major source of HAP emissions, then this subpart would be applicable per Section 63.3881(b).

c) Operational Restrictions

(1) The coating usage shall not exceed 1,800 gallons per rolling, 12-month period.

(2) The permittee shall cover the dip tank in order to reduce VOC emissions when this emissions unit is not actively in use.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the name and identification number of each coating employed;

b. the VOC content, excluding water and exempt solvents, in pounds per gallon, of each coating employed;

c. the number of gallons of each coating employed;

d. the number of hours the emissions unit was in operation;

e. the number of days the emissions unit was in operation;

f. the total VOC emissions from all coatings employed, in pounds per month (b. times c.);

g. the average daily emission rate, in pounds per day (f. divided by e.);

h. the average hourly coating usage, in gallons per hour (c. divided by d.);

i. the rolling, 12 month summation of coatings employed, in gallons; and

j. the rolling, 12-month VOC emissions, in tons, as calculated by the summation of monthly VOC emissions, multiplied by ton/2,000 lbs.

e) Reporting Requirements

(1) The permittee shall notify the Ohio EPA Northeast District Office in writing of any daily record showing use of noncomplying coatings, i.e., coatings exceeding 0.6 pound VOC per gallon, excluding water and exempt solvents. The notification shall include a copy of

such record and shall be sent to the Ohio EPA Northeast District Office within 30 days following the end of the calendar month.

(2) The permittee shall submit quarterly deviation (excursion) reports that include the following information for this emissions unit:

a. an identification of each day during which the VOC emissions were calculated to exceed 2.9 pounds per day;

b. an identification of each day during which VOC content of the coating exceeded 0.6 pound per gallon;

c. identification of each month during which the VOC emissions were calculated to exceed 0.54 ton per rolling, 12-month period; and

d. an identification of each month during which the cumulative volume of coatings employed during the past rolling, 12-month period exceeded 1,800 gallons.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

The VOC content shall not exceed 0.6 pound per gallon of coating, excluding water and exempt solvents, for coatings dried at temperatures not exceeding 200 degrees Fahrenheit.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1). Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the coatings.

b. Emission Limitation:

VOC emissions shall not exceed 2.9 pounds per day.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

c. Emission Limitation:

VOC emissions shall not exceed 0.54 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

d. Emission Limitation:

The coating usage shall not exceed 1,800 gallons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

(1) None.

6. P003, WheelabratorShotblast

Operations, Property and/or Equipment Description:

Enclosed WheelabratorShotblast.

a) 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.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. See b)(2)a.
b.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from this emissions unit shall not exceed 7.0 pounds per hour.
c.	OAC rule 3745-31-05(D)(1)(b)	Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 2.89 tons per year.

(2) Additional Terms and Conditions

a. Except as otherwise specified in paragraphs (A)(2) and (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the stack may exceed 20% opacity, as a 6-minute average for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60% opacity, as a 6-minute average, at any time.

c) Operational Restrictions

(1) The baghouse serving emissions units P003 and P005 shall be employed while this emissions unit is in operation.

(2) The production rate for the shotblasting unit shall not exceed 2.2 tons per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the total hours of operation;

b. the total amount of metal (castings) processed, in tons; and

c. the average, monthly production rate, in tons per hour, calculated by dividing (b) by (a).

(2) The permittee shall record the following information for each year of operation for this emissions unit:

a. the total hours of operation;

b. the total amount of metal (castings) processed, in tons;

c. the average, annual production rate, in tons per year, calculated by dividing (b) by (a); and

d. the annual emissions rate for PM_{10}, in tons per year, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs

where:

E = emissions rate, in tons per year;

EF = emission factor for controlled PM_{10} is 0.30 lb PM_{10}/ton metal *;

P = the average production rate, in tons per hour, as recorded in d)(2)c; and

H = hours of operation, in hours per year, as recorded in d)(2)a.

* Emission Factor of 0.30 lb PM_{10}/ton metal is based on test data, with controls.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 9.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information

obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack of the shotblasting unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. the month when the average production rate exceeded 2.2 tons per hour, as recorded in d)(1)c.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack of the shotblasting unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions were observed from the stack during a 6-month period, the permittee shall still submit a semi-annual report which states that no visible emissions were observed.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the above visible particulate emission limitation shall be demonstrated based upon visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PE from the stack serving this emissions unit shall not exceed 7.0 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall conduct, or have conducted, particulate emission testing at the outlet of the stack serving emissions units P003 and P005 to demonstrate compliance with the particulate emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

PM_{10} emission from this emissions unit shall not exceed 2.89 tons per year.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(2).

d. Operational Restriction:

The acceptable range for the pressure drop across the baghouse is 1.0 to 9.0 inches of water.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(3).

e. Operational Restriction:

The production rate for the shotblasting unit shall not exceed 2.2 tons per hour.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)c.

g) Miscellaneous Requirements

(1) None.

7. P005, PangbornTumblast

Operations, Property and/or Equipment Description:

Enclosed PangbornTumblastShotblast.

a) 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.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), (PTI 02-21102)	Particulate emissions (PE) from this emissions unit shall not exceed 0.95 pound per hour and 4.14 tons per year. Visible particulate emissions from the stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.
b.	OAC rule 3745-17-07(A)(1)	The visible particulate emission limitation required by this applicable rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)(1)	The particulate emission limitation required by this applicable rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

d.	OAC rule 3745-31-05(D)(1)(b)	Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 2.89 tons per year.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The baghouse serving emissions units P003 and P005 shall be employed while this emissions unit is in operation.

(2) The production rate for this emissions unit shall not exceed 2.2 tons of metal per hour.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the total hours of operation;

b. the total amount of metal (castings) processed, in tons; and

c. the average, monthly production rate, in tons per hour, calculated by dividing (b) by (a).

(2) The permittee shall record the following information for each year of operation for this emissions unit:

a. the total hours of operation;

b. the total amount of metal (castings) processed, in tons;

c. the average, annual production rate, in tons per year, calculated by dividing (b) by (a); and

d. the annual emissions rate for PM_{10} and the annual emissions rate for particulates, in tons per year, as calculated by the following equation:

E = EF x P x H x ton/2,000 lbs

where:

E = emissions rate, in tons per year;

EF = emission factor for PM_{10} is 0.30 lb PM_{10}/ton metal *;

emission factor for particulates is 0.43 lb PE/ton metal **;

P = the average production rate, in tons per hour, as recorded in d)(2)c; and

H = hours of operation, in hours per year, as recorded in d)(2)a.

* Emission Factor of 0.30 lb PM10/ton metal is based on test data, with controls.

** Emission Factor of 0.43 lb PE/ton metal is a calculated factor. Calculation assumes that 70% of PE is PM_{10} (AP-42 Table 12.10-9 (1/95) states PM_{10} to be 70% of PE for uncontrolled shakeout operations). Shakeout operations considered to be similar to P005. Therefore, (0.70)(X) = 0.30. (X) = 0.30/0.70 = 0.43 lb PE/ton.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 9.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. the month when the average production rate for the shotblasting unit exceeded 2.2 tons per hour, as recorded in d)(1)c; and

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District office by January 31 and July 31 of each year and shall cover the previous 6-month period.

If no visible particulate emissions were observed from the stack during a 6-month period, the permittee shall still submit a semi-annual report which states that no visible emissions were observed.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

(5) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack serving this emissions unit shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the above visible particulate emission limitation shall be demonstrated based upon visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PE from this emissions unit shall not exceed 0.95 pound per hour.

Applicable Compliance Method:

If required, the permittee shall conduct, or have conducted, particulate emission testing at the outlet of the stack serving emissions units P003 and P005 to demonstrate compliance with the particulate emission limitation in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

c. Emission Limitation:

PE from this emissions unit shall not exceed 4.14 tons per year.

PM_{10} emissions from this emissions unit shall not exceed 2.89 tons per year.

Applicable Compliance Method:

Compliance with the above emission limitations shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(2).

d. Operational Restriction:

The acceptable range for the pressure drop across the baghouse is 1.0 to 9.0 inches of water.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(3).

e. Operational Restriction:

The production rate for this emissions unit shall not exceed 2.2 tons of metal per hour.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)c.

g) Miscellaneous Requirements

(1) None.

8. P901, Cupola #1

Operations, Property and/or Equipment Description:

Cupola #1

a) 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. b)(1)f, c)(1), c)(2) c)(3), c)(7), d)(1), d)(2), d)(3), d)(4), d)(11), e)(1)a, e)(1)b, e)(1)c, f)(1)e, f)(1)f, f)(1)g, f)(1)h and f)(1)i

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving emissions units P901 and P902 shall not exceed 20% opacity, as a 6-minute average, except as provided in the rule. See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the stack serving emissions units P901 and P902 shall not exceed 12.09 pounds per hour. See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-18-06(A)	Sulfur dioxide (SO_2) emissions from the stack serving emissions units P901 and P902 shall not exceed 88.43 pounds per hour.
f.	OAC rule 3745-31-05(D)(1)(b)	Carbon monoxide (CO) emissions from this emissions unit shall not exceed 0.60 ton per rolling, 12-month period. Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 6.94 tons per rolling, 12-month period. Volatile organic compounds (VOC) emissions from this emissions unit shall not exceed 0.58 ton per rolling, 12-month period. See c)(7).

(2) Additional Terms and Conditions

a. Except as otherwise specified in paragraphs (A)(2) and (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the stack may exceed 20% opacity, as a 6-minute average for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60% opacity, as a 6-minute average, at any time.

b. Reasonably available control measures (RACM) shall be employed to minimize fugitive particulate emissions. RACM shall include, but not be limited to, maintaining a draft at the cupola door during charging. The draft fan amperage shall be continuously maintained at a value of not less than 55 amps at all times while the emissions unit is in operation. Additionally, charge materials shall typically be large in size and contain minor amounts of fines.

c. The PE limitation was calculated using "Table 1" of OAC rule 3745-17-11 per the agreement in the Consent Order filed on December 28, 2004.

c) Operational Restrictions

(1) Emissions units P901 and P902 shall not operate at the same time.

(2) The melting rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

(3) The annual operating hours for this emissions unit shall not exceed 1,550 hours, based upon a rolling, 12-month summation of the operating hours.

(4) The water flow through the nozzles of the scrubber shall be continuous and unobstructed while this emissions unit is in operation.

(5) The 15-minute average combustion zone temperature within the afterburner shall be at least 1,300 degrees Fahrenheit while this emissions unit is in operation. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-minute average.

(6) To ensure little or no hazardous air pollutant (HAP) emissions from the melting of scrap in this emissions unit, the permittee shall purchase and charge only certified-metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics or organic liquids.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the operating hours for each month;

b. the rolling, 12-month summation of the operating hours;

c. the amount of metal charged, in tons;

d. the rolling, 12-month summation of metal charged, in tons;

e. the average melting rate of this emissions unit each month, in tons metal per hour, calculated by dividing (c) by (a); and

f. the rolling, 12-month average melting rate of this emissions unit, in tons metal per hour, calculated by dividing (d) by (b).

(2) The permittee shall record each month the rolling, 12-month CO emissions rate, in tons, as calculated by the following equation:

E = EF x M x H x tons/2,000 lbs

where:

E = the rolling, 12-month emissions rate, in tons;

EF = emission factor for controlled CO is 0.154 lb CO/ton metal *;

M = the rolling, 12-month average melting rate of this emissions unit, as recorded in section d)(1)f, in tons per hour; and

H = the rolling, 12-month summation of the operating hours as recorded in d)(1)b.

* Emission factor of 0.154 lb CO/ton metal derived from stack testing on May 15, 2007.

(3) The permittee shall record each month the rolling, 12-month PM_{10} emissions rate, in tons, as calculated by the following equation:

E = EF x M x H x tons/2,000 lbs

where:

E = the rolling, 12-month emissions rate, in tons;

EF = emission factor for controlled PM_{10} is 1.783 lbs PM_{10}/ton metal *;

M = the rolling, 12-month average melting rate of this emissions unit, as recorded in d)(1)f, in tons per hour; and

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b.

* Emission factor of 1.783 lbs PM_{10}/ton metal derived from stack testing on May 15, 2007.

(4) The permittee shall record each month the rolling, 12-month VOC emissions rate, in tons, as calculated by the following equation:

E = EF x M x H x ton/2,000 lbs x (1-CE)

where:

E = the rolling, 12-month emissions rate, in tons;

EF = emission factor for VOC is 5 lbs VOC/ton metal *;

M = the rolling, 12-month average melting rate of this emissions unit, as recorded in d)(1)f, in tons per hour;

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b; and

CE = control efficiency, expressed as a decimal (CE for VOC is 0.97).

* Emission factor of 5 lbs VOC/ton metal is based on the reported 0.25% oil content in scrap (0.0025 = 5 lbs/2,000 lbs = 5 lbs VOC/ton metal).

(5) The permittee shall properly operate and maintain respective equipment to continuously monitor the static pressure drop across the scrubber and the amperage on the draft fan of the cupula while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

(6) The permittee shall collect and record the following information twice per shift (or at least twice every 8 hours) for each day the emissions unit is in operation:

a. the water flow to the scrubber, in "flow" or "no flow"; and

b. the amperage on the draft fan of the cupola.

(7) The permittee shall record the downtime for the scrubber and monitoring equipment, when this emissions unit is in operation.

(8) The permittee shall properly operate and maintain equipment to continuously monitor and record the temperature of the afterburner of this emissions unit.

(9) The permittee shall inspect the nozzles of the scrubber once per week. The inspection shall serve to check for adequate operation. The inspection findings, and any subsequent maintenance task performed, shall be recorded in a maintenance log for the scrubber.

If the weekly inspections find adequate nozzle operation for four consecutive weeks, then the inspection frequency may be reduced to once per month. Once a monthly inspection finds a need for maintenance and the task is completed, the inspection frequency shall return to weekly. After four consecutive weekly inspections find the nozzles to be operating properly, the frequency may again be monthly.

(10) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(11) The permittee shall inspect each purchase of scrap material and shall inspect each charge to this emissions unit to ensure that the material melted in this emissions unit is only certified-metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics or organic liquids.

The permittee shall record the following information:

a. date of when purchased scrap material is received on site;

b. inspection findings of the purchased material;

c. date and time of inspection of each charge to this emissions unit; and

d. inspection findings of the charged material to this emissions unit.

(12) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop across the scrubber, in inches of water column, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the scrubber, in inches of water column, twice per shift (or at least twice every 8 hours) for each day the emissions unit is in operation.

Whenever the monitored value for the pressure drop across the scrubber deviates from the minimum value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable minimum value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop across the scrubber immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The pressure drop across the scrubber shall be kept above 7.3 inches of water column while this emissions unit is in operation.

This pressure drop across the scrubber is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the pressure drop across the scrubber based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the pressure drop across the scrubber will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. any day when the average melting rate for this emissions unit was greater than 5.02 tons per hour;

b. the month when the rolling, 12-month summation of operating hours for this emissions unit exceeded 1,550 hours;

c. the month when the CO, PM_{10} and/or VOC emissions rate for this emissions unit exceeded the respective tons per rolling, 12-month emissions limitation;

d. date and time when the amperage on the draft fan of the cupola was below 55 amps; and

e. date and time when the 15-minute average combustion zone temperature within the afterburner was below 1,300 degrees Fahrenheit. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-minute average.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to

the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall report to the Ohio EPA, Northeast District Office, any material charged to this emissions unit that does not meet the criteria specified in c)(7). The report shall be submitted within 30 days of the occurrence and shall include the date and a description of the material charged.

(4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(5) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the scrubber was outside of the acceptable minimum value;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop across the scrubber into compliance with the acceptable minimum value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

(6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack serving emissions units P901 and P902 shall not exceed 20% opacity, as a 6-minute average, except as provided in the rule.

Applicable Compliance Method:

If required, compliance with the above visible particulate emission limitation shall be demonstrated based upon visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the above fugitive visible particulate emission limitation shall be demonstrated based upon fugitive visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitation:

PE from the stack serving emissions units P901 and P902 shall not exceed 12.09 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emissions limitation through emissions testing perfomed at the outlet of the stack serving emissions units P901 and P902 in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

d. Emission Limitation:

SO_2 emissions from the stack serving emissions units P901 and P902 shall not exceed 88.43 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emissions testing performed at the outlet of the stack serving emissions units P901 and P902 in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

e. Emission Limitation:

CO emissions from this emissions unit shall not exceed 0.60 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(2).

f. Emission Limitation:

PM_{10} emissions from this emissions unit shall not exceed 6.94 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(3).

g. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.58 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d(4).

h. Operational Restriction:

The melting rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)e.

i. Operational Restriction:

The annual operating hours for this emissions unit shall not exceed 1,550 hours, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1).

j. Operational Restriction:

The pressure drop across the scrubber shall be kept above 7.3 inches of water column while this emissions unit is in operation.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(12).

k. Operational Restriction:

The 15-minute average combustion zone temperature within the afterburner shall be at least 1,300 degrees Fahrenheit while this emissions unit is in operation. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-minute average.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(8).

(2) Reasonably Available Control Measures required by OAC rule 3745-17-08(B) that are employed for this emissions unit shall be considered adequate if compliance with the visible particulate emissions limitation contained in OAC rule 3745-17-07 is achieved.

g) Miscellaneous Requirements

(1) The permittee shall comply with the provisions of the Consent Order and Final Judgement Entry for State of Ohio ex rel. Petro v. Col-Pump Company, Inc., Columbiana County Court of Common Pleas, Case No. CV 2004 04 1204.

9. P902, Cupola #2

Operations, Property and/or Equipment Description:

Cupola #2

a) 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. b)(1)f, c)(1), c)(2) c)(3), c)(7), d)(1), d)(2), d)(3), d)(4), d)(11), e)(1)a, e)(1)b, e)(1)c, f)(1)e, f)(1)f, f)(1)g, f)(1)h and f)(1)i

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving emissions units P901 and P902 shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule. See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	Particulate emissions (PE) from the stack serving emissions units P901 and P902 shall not exceed 12.09 pounds per hour. See b)(2)c.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-18-06(A)	Sulfur dioxide (SO_2) emissions from the stack serving emissions units P901 and P902 shall not exceed 88.43 pounds per hour.
f.	OAC rule 3745-31-05(D)(1)(b)	Carbon monoxide (CO) emissions from this emissions unit shall not exceed 0.60 ton per rolling, 12-month period. Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 6.94 tons per rolling, 12-month period. Volatile organic compounds (VOC) emissions from this emissions unit shall not exceed 0.58 ton per rolling, 12-month period. See c)(7).

(1) Additional Terms and Conditions

a. Except as otherwise specified in paragraphs (A)(2) and (A)(3) of OAC rule 3745-17-07, visible particulate emissions from the stack may exceed 20% opacity, as a 6-minute average for not more than 6 consecutive minutes in any 60 minutes, but shall not exceed 60% opacity, as a 6-minute average, at any time.

b. Reasonably available control measures (RACM) shall be employed to minimize fugitive particulate emissions. RACM shall include, but not be limited to, maintaining a draft at the cupola door during charging. The draft fan amperage shall be continuously maintained at a value of not less than 55 amps at all times while the emissions unit is in operation. Additionally, charge materials shall typically be large in size and contain minor amounts of fines.

c. The PE limitation was calculated using "Table 1" of OAC rule 3745-17-11 per the agreement in the Consent Order filed on December 28, 2004.

c) Operational Restrictions

(1) Emissions units P901 and P902 shall not operate at the same time.

(2) The melting rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

(3) The annual operating hours for this emissions unit shall not exceed 1,550 hours, based upon a rolling, 12-month summation of the operating hours.

(4) The water flow through the nozzles of the scrubber shall be continuous and unobstructed while this emissions unit is in operation.

(5) The 15-minute average combustion zone temperature within the afterburner shall be at least 1,300 degrees Fahrenheit while this emissions unit is in operation. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-minute average.

(6) To ensure little or no hazardous air pollutant (HAP) emissions from the melting of scrap in this emissions unit, the permittee shall purchase and charge only certified-metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics or organic liquids.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall record the following information for each month of operation for this emissions unit:

a. the operating hours for each month;

b. the rolling, 12-month summation of the operating hours;

c. the amount of metal charged, in tons;

d. the rolling, 12-month summation of metal charged, in tons;

e. the average melting rate of this emissions unit each month, in tons metal per hour, calculated by dividing (c) by (a); and

f. the rolling, 12-month average melting rate of this emissions unit, in tons metal per hour, calculated by dividing (d) by (b).

(2) The permittee shall record each month the rolling, 12-month CO emissions rate, in tons, as calculated by the following equation:

E = EF x M x H x tons/2,000 lbs

where:

E = the rolling, 12-month emissions rate, in tons;

EF = emission factor for controlled CO is 0.154 lb CO/ton metal *;

M = the rolling, 12-month average melting rate of this emissions unit, as recorded in d)(1)f, in tons per hour; and

H = the rolling, 12-month summation of the operating hours as recorded in d)(1)b.

* Emission factor of 0.154 lb CO/ton metal derived from stack testing on May 15, 2007.

(3) The permittee shall record each month the rolling, 12-month PM_{10} emissions rate, in tons, as calculated by the following equation:

E = EF x M x H x tons/2,000 lbs

where:

E = the rolling, 12-month emissions rate, in tons;

EF = emission factor for controlled PM_{10} is 1.783 lbs PM_{10}/ton metal *;

M = the rolling, 12-month average melting rate of this emissions unit, as recorded in d)(1)f, in tons per hour; and

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b.

* Emission factor of 1.783 lbs PM_{10}/ton metal derived from stack testing on May 15, 2007.

(4) The permittee shall record each month the rolling, 12-month VOC emissions rate, in tons, as calculated by the following equation:

E = EF x M x H x ton/2,000 lbs x (1-CE)

where:

E = the rolling, 12-month emissions rate, in tons;

EF = emission factor for VOC is 5 lbs VOC/ton metal *;

M = the rolling, 12-month average melting rate of this emissions unit, as recorded in d)(1)f, in tons per hour;

H = the rolling, 12-month summation of the operating hours, as recorded in d)(1)b; and

CE = control efficiency, expressed as a decimal (CE for VOC is 0.97).

* Emission factor of 5 lbs VOC/ton metal is based on the reported 0.25% oil content in scrap (0.0025 = 5 lbs/2,000 lbs = 5 lbs VOC/ton metal).

(5) The permittee shall properly operate and maintain respective equipment to continuously monitor the static pressure drop across the scrubber and the amperage on the draft fan of the cupula while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

(6) The permittee shall collect and record the following information twice per shift (or at least twice every 8 hours) for each day the emissions unit is in operation:

a. the water flow to the scrubber, in "flow" or "no flow"; and

b. the amperage on the draft fan of the cupola.

(7) The permittee shall record the downtime for the scrubber and monitoring equipment, when this emissions unit is in operation.

(8) The permittee shall properly operate and maintain equipment to continuously monitor and record the temperature of the afterburner of this emissions unit.

(9) The permittee shall inspect the nozzles of the scrubber once per week. The inspection shall serve to check for adequate operation. The inspection findings, and any subsequent maintenance task performed, shall be recorded in a maintenance log for the scrubber.

If the weekly inspections find adequate nozzle operation for four consecutive weeks, then the inspection frequency may be reduced to once per month. Once a monthly inspection finds a need for maintenance and the task is completed, the inspection frequency shall return to weekly. After four consecutive weekly inspections find the nozzles to be operating properly, the frequency may again be monthly.

(10) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emissions incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emission unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

(11) The permittee shall inspect each purchase of scrap material and shall inspect each charge to this emissions unit to ensure that the material melted in this emissions unit is only certified-metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics or organic liquids.

The permittee shall record the following information:

a. date of when purchased scrap material is received on site;

b. inspection findings of the purchased material;

c. date and time of inspection of each charge to this emissions unit; and

d. inspection findings of the charged material to this emissions unit.

(12) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop across the scrubber, in inches of water column, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the scrubber, in inches of water column, twice per shift (or at least twice every 8 hours) for each day the emissions unit is in operation.

Whenever the monitored value for the pressure drop across the scrubber deviates from the minimum value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date(s) the investigation was conducted;

d. the names of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable minimum value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date it was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop across the scrubber immediately after the corrective action; and

f. the names of the personnel who performed the work.

Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The pressure drop across the scrubber shall be kept above 7.3 inches of water column while this emissions unit is in operation.

This pressure drop across the scrubber is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the pressure drop across the scrubber based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the pressure drop across the scrubber will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports for all exceedances as follows:

a. any day when the average melting rate for this emissions unit was greater than 5.02 tons per hour;

b. the month when the rolling, 12-month summation of operating hours for this emissions unit exceeded 1,550 hours;

c. the month when the CO, PM_{10} and/or VOC emissions rate for this emissions unit exceeded the respective tons per rolling, 12-month period emissions limitation;

d. date and time when the amperage on the draft fan of the cupola was below 55 amps; and

e. date and time when the 15-minute average combustion zone temperature within the afterburner was below 1,300 degrees Fahrenheit. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-minute average.

The calendar quarters are January 1 - March 31, April 1 - June 30, July 1 - September 30, and October 1 - December 31. The quarterly deviation reports shall be submitted to

the Ohio EPA Northeast District Office quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

If no deviations occurred during a calendar quarter, the permittee shall still submit a quarterly report which states that no deviations occurred during the quarter.

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

(3) The permittee shall report to the Ohio EPA, Northeast District Office, any material charged to this emissions unit that does not meet the criteria specified in c)(7). The report shall be submitted within 30 days of the occurrence and shall include the date and a description of the material charged.

(4) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(5) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the scrubber was outside of the acceptable minimum value;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop across the scrubber into compliance with the acceptable minimum value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

(6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Visible particulate emissions from the stack serving emissions units P901 and P902 shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance with the above visible particulate emission limitation shall be demonstrated based upon visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the above fugitive visible particulate emission limitation shall be demonstrated based upon fugitive visible emission observations perform in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

c. Emission Limitation:

PE from the stack serving emissions units P901 and P902 shall not exceed 12.09 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emissions limitation through emissions testing perfomed at the outlet of the stack serving emissions units P901 and P902 in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

d. Emission Limitation:

SO_2 emissions from the stack serving emissions units P901 and P902 shall not exceed 88.43 pounds per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emissions testing performed at the outlet of the stack serving emissions units P901 and P902 in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

e. Emission Limitation:

CO emissions from this emissions unit shall not exceed 0.60 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(2).

f. Emission Limitation:

PM_{10} emissions from this emissions unit shall not exceed 6.94 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(3).

g. Emission Limitation:

VOC emissions from this emissions unit shall not exceed 0.58 ton per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon the monitoring and record keeping requirement specified in d(4).

h. Operational Restriction:

The melting rate for this emissions unit shall not exceed 5.02 tons of metal per hour.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1)e.

i. Operational Restriction:

The annual operating hours for this emissions unit shall not exceed 1,550 hours, based upon a rolling, 12-month summation of the operating hours.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirement specified in d)(1).

j. Operational Restriction:

The pressure drop across the scrubber shall be kept above 7.3 inches of water column while this emissions unit is in operation.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(12).

k. Operational Restriction:

The 15-minute average combustion zone temperature within the afterburner shall be at least 1,300 degrees Fahrenheit while this emissions unit is in operation. Periods when the cupola is off blast and for 15 minutes after going on blast from an off blast condition shall not be included in the 15-minute average.

Applicable Compliance Method:

Compliance with the above operational restriction shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(8).

(2) Reasonably Available Control Measures required by OAC rule 3745-17-08(B) that are employed for this emissions unit shall be considered adequate if compliance with the visible particulate emissions limitation contained in OAC rule 3745-17-07 is achieved.

g) Miscellaneous Requirements

(1) The permittee shall comply with the provisions of the Consent Order and Final Judgement Entry for State of Ohio ex rel. Petro v. Col-Pump Company, Inc., Columbiana County Court of Common Pleas, Case No. CV 2004 04 1204.