



4/17/2015

Certified Mail

Renee Olney  
Liberty Casting Co  
550 Liberty Rd  
Delaware, OH 43015

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 0121010003  
Permit Number: P0118469  
Permit Type: Administrative Modification  
County: Delaware

No	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Delaware Gazette. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall  
Permit Review/Development Section  
Ohio EPA, DAPC  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, Ohio 43216-1049

and Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,

Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 -Via E-Mail Notification  
Ohio EPA-CDO



## PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: <http://epa.ohio.gov/actions.aspx> or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-2129 email: [HClerk@epa.ohio.gov](mailto:HClerk@epa.ohio.gov)

Draft Air Pollution Permit-to-Install Administrative Modification  
Liberty Casting Co

550 Liberty Rd., Delaware, OH 43015

ID#:P0118469

Date of Action: 4/17/2015

Permit Desc:Administrative modification to update emission factors and the addition of fugitive emissions limitations to ensure the project emissions are less than PSD applicability..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: Adam Novak, Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049, Columbus, OH 43216-1049. Ph: (614)728-3778





## Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination

Netting Determination

2. Source Description:

P083 – 3 MT electric induction furnace 1A, 2.5 tons/hr melt rate

P084 – 3 MT electric induction furnace 1B, 2.5 tons/hr melt rate

P085 – 3 MT electric induction furnace 2A, 2.5 tons/hr melt rate

P086 – 3 MT electric induction furnace 2B, 2.5 tons/hr melt rate

P087 – Scrap handling and preparation of 3 MT induction furnaces

3. Facility Emissions and Attainment Status:

Liberty Casting is a grey iron foundry located in Delaware County. The facility is a major source for particulates, VOC, and HAP(s) emissions. Delaware County is currently in non-attainment with the 2008, 8-hour ozone standard.

4. Source Emissions:

Givens for P083, P084, P085, P086			
Throughput	5 tons metal melted/hr	25,000 tons metal melted/yr	
BF Melt Baghouse	0.003 gr/dscf	5000 hrs/yr	
Air Flow	28000 dscfm		
Capture Hood	98%		
Calculations using SCC 30400303 WebFIRE, unless otherwise noted			
PM ~ 9.00E-1 lb PM/ton metal			
Uncontrolled (lb/hr)	(5 tons metal/hr) * (9.00 E-1 lb PM/ton metal)		4.50
Controlled (lb/hr)	(0.003 gr/dscf) * (lb/7000) * (28,000 dscfm) * (60 min/hr)		0.72
Uncontrolled (tpy)	(4.50 lb PM/hr) * (8760 hrs/yr) * (ton/2000 lbs)		19.71
Controlled (tpy)	(0.72 lb PM/hr) * (5000 hrs/yr) * (ton/2000 lbs)		1.80
PM10 ~ 8.6E-1 lb PM10/ton metal			
Uncontrolled (lb/hr)	(5 tons metal/hr) * (8.6 E-1 lb PM10/ton metal)		4.30
Controlled (lb/hr)	(0.003 gr/dscf) * (lb/7000) * (28,000 dscfm) * (60 min/hr)		0.72
Uncontrolled (tpy)	(4.30 lb PM10/hr) * (8760 hrs/yr) * (ton/2000 lbs)		18.83



Controlled (tpy)	(0.72 lb PM10/hr) * (5000 hrs/yr) * (ton/2000 lbs)	1.80
<b>PM2.5 ~ 8.6E-1 lb PM10/ton metal (US EPA's PM calculator)</b>		
Uncontrolled (lb/hr)	(5 tons metal/hr) * (8.6 E-1 lb PM2.5/ton metal)	4.30
Controlled (lb/hr)	(0.003 gr/dscf) * (lb/7000) * (28,000 dscfm) * (60 min/hr)	0.72
Uncontrolled (tpy)	(4.30 lb PM/hr) * (8760 hrs/yr) * (ton/2000 lbs)	18.83
Controlled (tpy)	(0.72 lb PM/hr) * (5000 hrs/yr) * (ton/2000 lbs)	1.80
<b>Pb ~ 9.00E-3 lbPb/ton metal</b>		
Controlled (lb/hr)	(5 tons metal/hr) * (9.00E-3 lbPb/ton metal)	0.05
Controlled (tpy)	(25,000 tons metal/yr) * (9.00E-3 lbPb/ton metal) * (ton/2000 lbs)	0.11
<b>Mn ~ 2.25E-2 lbMn/ton metal</b>		
Controlled (lb/hr)	(5 tons metal/hr) * (2.25E-2 lbMn/ton metal)	0.11
Controlled (tpy)	(25,000 tons metal/yr) * (2.25E-2 lbMn/ton metal) * (ton/2000 lbs)	0.28
<b>Fugitive PM Emissions</b> <i>Calculations using SCC 30400303</i>		
<b>PM ~ 9.00E-1 lb PM/ton metal</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (0.9 lb PM/ton metal) * (1-0.98)	0.09
Fugitive Emissions (tpy)	(0.9 lb PM/ton metal) * (25,000 tons metal/yr) * (1-0.98) * (ton/2000 lbs)	0.23
<b>PM10 ~ 8.6E-1 lb PM10/ton metal</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (0.86 lb PM/ton metal) * (1-0.98)	0.09
Fugitive Emissions (tpy)	(0.86 lb PM10/ton metal) * (25,000 tons metal/yr) * (1-0.98) * (ton/2000 lbs)	0.22
<b>PM2.5 ~ 8.6E-1 lb PM10/ton metal (US EPA's PM calculator)</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (0.86 lb PM/ton metal) * (1-0.98)	0.09
Fugitive Emissions (tpy)	(0.86 lb PM2.5/ton metal) * (25,000 tons metal/yr) * (1-0.98) * (ton/2000 lbs)	0.22
<b>Pb ~ 9.00E-3 lbPb/ton metal</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (9.00E-3 lbPb/ton metal) * (1-0.98)	0.001
Fugitive Emissions (tpy)	(9.00E-3 lbPb/ton metal) * (25,000 tons metal/yr) * (1-0.98) * (ton/2000)	0.002
<b>Mn ~ 2.25E-2 lbMn/ton metal</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (2.25E-2 lbMn/ton metal) * (1-0.98)	0.002
Fugitive Emissions (tpy)	(2.25E-2 lbMn/ton metal) * (25,000 tons metal/yr) * (1-0.98) * (ton/2000 lbs)	0.006

Stack and Fugitive Emissions	Emissions for P083, P084, P085, P086				
	PM	PM10	PM2.5	Pb	Mn
Uncontrolled (lb/hr)	4.59	4.30	4.30		
Controlled (lb/hr)	0.81	0.81	0.81	0.05	0.11
Uncontrolled (tpy)					
Controlled (tpy)	2.03	2.02	2.02	0.11	0.29



<b>Givens for P087</b>		
Throughput	5 tons metal melted/hr	25,000 tons metal melted/yr
		5000 hrs/yr
<b>Fugitive Emissions</b>		
<i>Calculations using SCC 30400315</i>		
<b>PM ~ 0.07 lb PM/ton metal (Bernard S. Gutow, Modern Castings, Jan. 1972)</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (0.07 lb PM/ton metal)	0.35
Uncontrolled (tpy)	(0.35 lb PM/hr) * (8760 hrs/yr) * (ton/2000 lbs)	1.53
Fugitive Emissions (tpy)	(0.35 lb PM/hr) * (5000 hrs/yr) * (ton/2000 lbs)	0.88
<b>PM10 ~ 0.042 lb PM/ton metal (US EPA's PM Calculator)</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (0.04 lb PM10/ton metal)	0.20
Uncontrolled (tpy)	(0.20 lb PM10/hr) * (8760 hrs/yr) * (ton/2000 lbs)	0.88
Fugitive Emissions (tpy)	(0.20 lb PM10/hr) * (5000 hrs/yr) * (ton/2000 lbs)	0.50
<b>PM2.5 ~ 0.035 lb PM/ton metal (US EPA's PM Calculator)</b>		
Fugitive Emissions (lb/hr)	(5 tons metal/hr) * (0.035 lb PM10/ton metal)	0.18
Uncontrolled (tpy)	(0.18 lb PM10/hr) * (8760 hrs/yr) * (ton/2000 lbs)	0.79
Fugitive Emissions (tpy)	(0.18 lb PM10/hr) * (5000 hrs/yr) * (ton/2000 lbs)	0.45

Fugitive Emissions	Emissions from P087		
	PM	PM10	PM2.5
Uncontrolled (lb/hr)	0.35	0.20	0.18
Controlled (lb/hr)			
Uncontrolled (tpy)	1.53	0.88	0.79
Controlled (tpy)	0.88	0.50	0.45

5. Conclusion:

Project emissions were evaluated against PSD and non-attainment NSR thresholds for PM, PM10, and PM2.5.

P083, P084, P085, P086 – Synthetic minor established to avoid PSD for PM10 and PM2.5. The emissions unit vents to the Melt baghouse, which is subject to 0.003 gr/dscf, the BLDS requirements in 40 CFR 63, EEEEE. The fugitive VEs are subject to the opacity requirement in 40 CFR 63, EEEEE. Emission testing is required by using Methods 1-5, 201, and 202.

P087 – Synthetic minor established to avoid PSD for PM10 and PM2.5 by limiting the annual operating hours.



6. Please provide additional notes or comments as necessary:

None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

<u>Pollutant</u>	<u>Tons Per Year</u>
<u>PM</u>	<u>2.91</u>
<u>PM10</u>	<u>2.53</u>
<u>PM2.5</u>	<u>2.48</u>
<u>Pb</u>	<u>0.11</u>
<u>Mn</u>	<u>0.29</u>



**DRAFT**

**Division of Air Pollution Control  
Permit-to-Install  
for  
Liberty Casting Co**

Facility ID:	0121010003
Permit Number:	P0118469
Permit Type:	Administrative Modification
Issued:	4/17/2015
Effective:	To be entered upon final issuance





**Division of Air Pollution Control**  
**Permit-to-Install**  
for  
Liberty Casting Co

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	3
1. Federally Enforceable Standard Terms and Conditions .....	4
2. Severability Clause .....	4
3. General Requirements .....	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting .....	6
6. Compliance Requirements .....	6
7. Best Available Technology .....	7
8. Air Pollution Nuisance .....	8
9. Reporting Requirements .....	8
10. Applicability .....	8
11. Construction of New Sources(s) and Authorization to Install .....	8
12. Permit-To-Operate Application .....	9
13. Construction Compliance Certification .....	10
14. Public Disclosure .....	10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations .....	10
16. Fees.....	10
17. Permit Transfers .....	10
18. Risk Management Plans .....	10
19. Title IV Provisions .....	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions .....	13
1. P087, 3MT Scrap Handling .....	14
2. Emissions Unit Group -Induction Furnaces: P083, P084, P085, P086 .....	21





**Draft Permit-to-Install**  
Liberty Casting Co  
**Permit Number:** P0118469  
**Facility ID:** 0121010003

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 0121010003  
Facility Description: Gray iron foundry located at 550 South Liberty Road, Delaware, Ohio.  
Application Number(s): M0003252, M0003259  
Permit Number: P0118469  
Permit Description: Administrative modification to update emission factors and the addition of fugitive emissions limitations to ensure the project emissions are less than PSD applicability.  
Permit Type: Administrative Modification  
Permit Fee: \$1,375.00 *DO NOT send payment at this time, subject to change before final issuance*  
Issue Date: 4/17/2015  
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Liberty Casting Co  
550 Liberty Rd  
Delaware, OH 43015

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

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Central District Office  
50 West Town Street, 6th Floor  
P.O. Box 1049  
Columbus, OH 43216-1049  
(614)728-3778

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0118469  
Permit Description: Administrative modification to update emission factors and the addition of fugitive emissions limitations to ensure the project emissions are less than PSD applicability.

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

**Emissions Unit ID: P087**  
Company Equipment ID: 3MT Scrap Handling  
Superseded Permit Number: P0116874  
General Permit Category and Type: Not Applicable

**Group Name: Induction Furnaces**

<b>Emissions Unit ID:</b>	<b>P083</b>
Company Equipment ID:	Furnace 1A
Superseded Permit Number:	P0116874
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P084</b>
Company Equipment ID:	Furnace 1B
Superseded Permit Number:	P0116874
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P085</b>
Company Equipment ID:	Furnace 2A
Superseded Permit Number:	P0116874
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P086</b>
Company Equipment ID:	Furnace 2B
Superseded Permit Number:	P0116874
General Permit Category and Type:	Not Applicable



**Draft Permit-to-Install**  
Liberty Casting Co  
**Permit Number:** P0118469  
**Facility ID:** 0121010003  
**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



## **1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A.2.a), Severability Clause
  - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
  - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
  - (4) Standard Term and Condition A.9., Reporting Requirements
  - (5) Standard Term and Condition A.10., Applicability
  - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
  - (7) Standard Term and Condition A.14., Public Disclosure
  - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
  - (9) Standard Term and Condition A.16., Fees
  - (10) Standard Term and Condition A.17., Permit Transfers

## **2. Severability Clause**

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## **3. General Requirements**

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.



- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

#### **4. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.



- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Central District Office. The written reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
  - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Central District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
  - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

## **5. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Central District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **6. Compliance Requirements**

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted



local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA DAPC, Central District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

## **7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.



**8. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Central District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Central District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

**11. Construction of New Sources(s) and Authorization to Install**

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual



obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

## **12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.



**13. Construction Compliance Certification**

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

**18. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

**19. Title IV Provisions**



**Draft Permit-to-Install**  
Liberty Casting Co  
**Permit Number:** P0118469  
**Facility ID:** 0121010003

**Effective Date:** To be entered upon final issuance

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

## **B. Facility-Wide Terms and Conditions**



**Draft Permit-to-Install**  
Liberty Casting Co  
**Permit Number:** P0118469  
**Facility ID:** 0121010003

**Effective Date:** To be entered upon final issuance

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
  - a) None.
2. The following emissions units in this permit are subject to National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart EEEEE, Maximum Achievable Control Standards (MACT): P083, P084, P085, P086, and P087. The complete NESHAP/MACT requirements, including the NESHAP/MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District Office or local air agency.



**Draft Permit-to-Install**  
Liberty Casting Co  
**Permit Number:** P0118469  
**Facility ID:** 0121010003  
**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. P087, 3MT Scrap Handling**

**Operations, Property and/or Equipment Description:**

Scrap handling and preparation for 3 MT induction furnaces

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)c. and b)(2)a.

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(D)  [Synthetic minor to avoid PSD applicability]	Particulate matter (PM) fugitive emissions shall not exceed 0.88 tons per rolling, 12-month summation.  Particulate matter less 10 microns in diameter (PM10) fugitive emissions shall not exceed 0.50 tons per rolling, 12-month summation.  Particulate matter less than 2.5 microns in diameter (PM2.5) fugitive emissions shall not exceed 0.45 tons per rolling, 12-month summation.  The requirements of this rule are equivalent to the requirements of 40 CFR Part 63, Subpart EEEEE.  See c)(1) below
b.	OAC rule 3745-31-05(A)(3), as effective 06/30/08	The requirements of this rule are equivalent to the requirements of 40 CFR Part 63, Subpart EEEEE for scrap handling that does not contain motor vehicle scrap.  See b)(2)a. below
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/08	See b)(2)b. below
d.	OAC rule 3745-17-11(B)	Particulate emissions (PE) shall not



**Effective Date:** To be entered upon final issuance

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		exceed 12.0 pounds per hour (lbs/hr).
e.	OAC rule 3745-17-07(B)	See b)(2)c. below
f.	OAC rule 3745-17-08(B)	See b)(2)d. below
g.	40 CFR Part 63, Subpart EEEEE  [In accordance with 40 CFR 63.7682 this facility is an existing iron foundry subject to the emission limitations/control measures specified in this section]	For each building or structure housing any iron foundry emissions source at the iron foundry, you must not discharge any fugitive emissions that exhibit opacity greater than 20% (6-minute average), except for one 6-minute average per hour that does not exceed 27% opacity.  See b)(2)e., c)(2), d)(2), and e)(3)
h.	40 CFR Part 63, Subpart A	Table I of 40 CFR Part 63, Subpart EEEEE, <i>Applicability of General Provisions to Subpart EEEEE</i> identifies which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

[Authority for term: OAC rule 3745-31-05(A)(3), as effective 06/30/2008]

- b. These requirements apply once U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

- i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM, PM10, and PM2.5 emissions from this air contaminant source since the calculated annual emission rate for PM, PM10, and PM2.5 is less than 10 tons/year, taking into account the federally enforceable rule limit of 5,000 hours per year, based upon a rolling, 12-month summation under OAC rule 3745-31-05(D).

- ii. Particulate emissions shall not exceed 12.0 pounds per hour.

[Authority for term: OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/2008]

- c. The emissions units are exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).



**Effective Date:** To be entered upon final issuance

- d. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive emissions from these emissions units.
- e. The permittee shall comply with the applicable requirements necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7734(a)(7)	Initial compliance demonstration for fugitive emissions from foundry operations.
63.7735	Initial compliance for scrap certification
63.7743(a)(7), (12)	Continuous compliance with the fugitive emissions limitation.
63.7746	Other requirements to demonstrate continuous compliance.
63.7760	Other requirements and information.
63.7761	Other requirements and information.

[Authority for term: 40 CFR Part 63, Subpart EEEEE]

c) Operational Restrictions

- (1) The maximum annual hours of operation for the emissions unit shall not exceed 5,000 hours per year, based upon a rolling, 12-month summation of the operational hours. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Annual Operating Hours</u>
1	416
1-2	832
1-3	1,248
1-4	1,664
1-5	2,080
1-6	2,496
1-7	2,912
1-8	3,328
1-9	3,744
1-10	4,160
1-11	4,576
1-12	5,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual hours of operation rate shall be based upon a rolling, 12-month summation of the hours of operation.



[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D)]

- (2) The permittee shall comply with the applicable operational restrictions necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7700(a)	Work practice standards for scrap handling
63.7700(b)	Written certification for scrap purchases
63.7700(c)	Written plan for selection and inspection of scrap purchases
63.7710(a)	Operational and maintenance (general)

[Authority for term: 40 CFR Part 63, Subpart EEEEE]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the total amount of metal charged;
  - b. the number of hours operated each month;
  - c. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the operation hours;
  - d. the monthly PM, PM10, and PM2.5 fugitive emissions;
  - e. the calculated rolling, 12-month summation of PM, PM10, and PM2.5 fugitive emissions, in tons based on the calculations in f)(1)a. – c. below.

The updated rolling, 12-month summation of the total PM, PM10, and PM2.5 emissions shall include the information for the current month and the preceding eleven calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative hours of operation for each calendar month.

[Authority for term: OAC rule 3745-77-07(C) and OAC rule 3745-31-05(D)]

- (2) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7744(a)	Records to document continuous compliance with scrap certification
63.7752(a), (c)	Recordkeeping



63.7753	What form records must be kept in and how long
---------	--

[Authority for term: 40 CFR Part 63, Subpart EEEEE]

e) Reporting Requirements

- (1) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month limitation on the hours of operations; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation; and
  - b. all exceedances of the rolling, 12-month summation of PM, PM10, and PM2.5 fugitive emissions.

The permittee shall identify any exceedances of the limitations established in Sections c)(1) for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(A)(3)(c) and OAC rule 3745-31-05(D)]

- (3) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7751(a)	Compliance report due dates
63.7751(b)	Compliance report contents
63.7751(c)	Immediate startup, shutdown, and malfunction report
63.7751(d)	Semiannual deviation report associated with TV operating permit

[Authority for term: 40 CFR Part 63, Subpart EEEEE]



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:

PM fugitive emissions shall not exceed 0.88 tons per rolling, 12-month summation

Applicable Compliance Method:

The monthly fugitive emissions shall be based on the following equation:

$$PM = (P) * (EF) * (\text{ton}/2000 \text{ lbs})$$

where,

PM = PM emissions (monthly)

P = hours of operation (monthly operational hours, as determined d)(1)b.)

EF = 0.07 lb PM/ton metal (Bernard S. Gutow, Modern Castings, Jan. 1972; PTI Application M0003259)

b. Emission Limitation:

PM10 fugitive emissions shall not exceed 0.50 tons per rolling, 12-month summation

Applicable Compliance Method:

The monthly fugitive emissions shall be based on the following equation:

$$PM10 = (P) * (EF) * (\text{ton}/2000 \text{ lbs})$$

where,

PM10 = PM10 emissions (monthly)

P = hours of operation (monthly operational hours, as determined d)(1)b.)

EF = 0.042 lb PM10/ton metal (US EPA's PM Calculator; PTI Application M0003259)

c. Emission Limitation:

PM2.5 fugitive emissions shall not exceed 0.45 tons per rolling, 12-month summation



Applicable Compliance Method:

The monthly fugitive emissions shall be based on the following equation:

$$PM_{2.5} = (P) * (EF) * (\text{ton}/2000 \text{ lbs})$$

where,

$$PM_{2.5} = PM_{2.5} \text{ emissions (monthly)}$$

$$P = \text{hours of operation (monthly operational hours, as determined d)(1)b.)}$$

$$EF = 0.035 \text{ lb } PM_{2.5}/\text{ton metal (US EPA's PM Calculator; PTI Application M0003259)}$$

d. Emission Limitation:

PE shall not exceed 12.0 lbs/hr

Applicable Compliance Method:

Compliance shall be determined by the following equation.

$$PE = (\text{throughput}) * (\text{emission factor})$$

where,

$$\text{throughput} = 5.0 \text{ tons metal charged/hr (EAC form, submitted with PTI application M0003259)}$$

$$\text{emission factor} = 0.60 \text{ lb PM/ton metal (WebFIRE, SCC 30400315)}$$

[Authority for term: OAC rule 3745-17-11(B) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.



**2. Emissions Unit Group -Induction Furnaces: P083, P084, P085, P086**

EU ID	Operations, Property and/or Equipment Description
P083	3MT electric induction furnace 1A, 2.5 tons/hr melt rate
P084	3MT electric induction furnace 1B, 2.5 tons/hr melt rate
P085	3MT electric induction furnace 2A, 2.5 tons/hr melt rate
P086	3MT electric induction furnace 2B, 2.5 tons/hr melt rate

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) b)(1)b. and b)(2)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(D)  [Synthetic minor to avoid PSD applicability]	<u>The following are combined emission limitations for P083, P084, P085, and P086:</u>  Particulate matter (PM) stack and fugitive emissions shall not exceed 2.03 tons per rolling, 12-month summation.  Particulate matter less 10 microns in diameter (PM10) stack and fugitive emissions shall not exceed 2.02 tons per rolling, 12-month summation.  Particulate matter less than 2.5 microns in diameter (PM2.5) stack and fugitive emissions shall not exceed 2.02 tons per rolling, 12-month summation.  The requirements of this rule are equivalent to the requirements of 40 CFR Part 63, Subpart EEEEE.  See b)(2)a. – c., and c)(1) – (7)
b.	OAC rule 3745-31-05(A)(3), as effective 06/30/08	For PM, PM10, and PM2.5 see b)(1)a. and b)(2)a. – d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 06/30/08	For PM, PM10, and PM2.5 see b)(2)e.i.
d.	OAC rule 3745-17-11(B)	Particulate emissions (PE) shall not exceed 12.0 pounds per hour (lbs/hr).
e.	OAC rule 3745-17-07(B)	See b)(2)c. below
f.	OAC rule 3745-17-08(B)	See b)(2)d. below
g.	40 CFR Part 63, Subpart EEEEE  [In accordance with 40 CFR 63.7682 this facility is an existing iron foundry subject to the emission limitations/control measures specified in this section]	For each building or structure housing any iron foundry emissions source at the iron foundry, you must not discharge any fugitive emissions that exhibit opacity greater than 20% (6-minute average), except for one 6-minute average per hour that does not exceed 27% opacity.  The particulate emission limitation (0.005 gr/dscf) established by this rule is less stringent than the particulate emission limitations established by OAC rule 3745-31-05(D).
h.	40 CFR Part 63, Subpart A	Table I of 40 CFR Part 63, Subpart EEEEE, <i>Applicability of General Provisions to Subpart EEEEE</i> identifies which parts of the General Provisions in 40 CFR 63.1-15 apply.

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions units are in operation.  
  
[Authority for term: OAC rule 3745-31-05(D)]
- b. The baghouse serving the emissions unit shall achieve an outlet concentration of 0.003 grains per dry standard cubic foot (gr/dscf) for PM, PM10, and PM2.5.  
  
[Authority for term: OAC rule 3745-31-05(D)]
- c. The permittee shall use a capture hood with 98% capture efficiency.  
  
[Authority for term: OAC rule 3745-31-05(D)]
- d. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).  
  
[Authority for term: OAC rule 3745-31-05(A)(3), as effective 06/30/2008]



**Effective Date:** To be entered upon final issuance

- e. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:
  - i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM, PM10, and PM2.5 emissions for these emissions unit because the potential to emit for each pollutant, taking into consideration the federally enforceable limitations established pursuant to OAC rule 3745-31-05(D), is less than ten tons per year.
  - ii. Particulate emissions shall not exceed 12.0 pounds per hour.
- f. The emissions unit is exempt from OAC rule 3745-17-07(B)(1) pursuant to OAC rule 3745-17-07(B)(11)(e).
- g. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rule 3745-17-08(B) does not apply to the fugitive emissions from this emissions unit.
- h. The permittee shall comply with the applicable requirements necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7734(a)	Initial compliance demonstration
63.7745	Continuous compliance with operation and maintenance requirements
63.7746	Other requirements to demonstrate continuous compliance
63.7760	Other requirements and information
63.7761	Other requirements and information

[Authority for term: 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-31-05(D)]

c) Operational Restrictions

- (1) The maximum annual metal melted for the emissions unit shall not exceed 25,000 tons of metal, based upon a rolling, 12-month summation of the metal melted figures. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the metal melt rate specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Sand Purchased</u>
1	2,083
1-2	4,166
1-3	6,249
1-4	8,332



**Effective Date:** To be entered upon final issuance

<u>Month(s)</u>	<u>Maximum Allowable Sand Purchased</u>
1-5	10,415
1-6	12,489
1-7	14,581
1-8	16,664
1-9	18,747
1-10	20,830
1-11	22,913
1-12	25,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual sandpurchased limitation shall be based upon a rolling, 12-month summation of the sandpurchased figures.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D)]

- (2) The maximum annual hours of operation for the emissions unit shall not exceed 5,000 hours per year, based upon a rolling, 12-month summation of the operational hours. To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Annual Operating Hours</u>
1	416
1-2	832
1-3	1,248
1-4	1,664
1-5	2,080
1-6	2,496
1-7	2,912
1-8	3,328
1-9	3,744
1-10	4,160
1-11	4,576
1-12	5,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual hours of operation rate shall be based upon a rolling, 12-month summation of the hours of operation.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(D)]

- (3) The permittee shall employ a bag leak detection system for each negative pressure baghouse or positive pressure baghouse.



[Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(D), and 40 CFR Part 63, Subpart EEEEE]

- (4) Each bag leak detection system shall meet the following specifications and requirements:
- a. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PM emissions at concentrations or 10 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.
  - b. The bag leak detection system sensor shall provide output of relative PM loadings; and the permittee shall continuously record the output from the bag leak detection system using a strip chart recorder, data logger, or other means.
  - c. The bag leak detection system shall be equipped with an alarm system that will react when the system detects an increase in relative particulate loading over the alarm set point established according to "d" below, and the alarm must be located such that it can be heard by the appropriate plant personnel.
  - d. During the initial adjustment of the bag leak detection system, at a minimum, the baseline output shall be established by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.
  - e. Except as allowed in "f" below, following the initial adjustment, the averaging period, alarm set point, or alarm delay time shall not be adjusted without approval from the Director.
  - f. Once per quarter, the sensitivity of the bag leak detection system may be adjusted to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific bag leak detection system monitoring plan.
  - g. The bag leak detection sensor shall be installed downstream of the fabric filter and upstream of any wet scrubber.
  - h. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

[Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(D), and 40 CFR Part 63, Subpart EEEEE]

- (5) The permittee shall prepare a site-specific monitoring plan for each bag leak detection system to be incorporated into the operation and maintenance (O&M) plan. The permittee must operate and maintain each bag leak detection system to the plan at all times. Each plan must address all of the items identified below.
- a. Installation of the bag leak detection system.
  - b. Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.



Effective Date: To be entered upon final issuance

- c. Operation of the bag leak detection system including quality assurance procedures.
- d. Maintenance of the bag leak detection system including routine maintenance schedule and spare parts inventory list.
- e. How the bag leak detection system output will be recorded and stored.
- f. Procedures for determining what corrective actions are necessary in the event of a bag leak detection alarm.

[Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(D) and 40 CFR Part 63, Subpart EEEEE]

- (6) In the event that a bag leak detection system alarm is triggered, the permittee shall initiate corrective action to determine the cause of the alarm within 1-hour of the alarm, initiate corrective action to correct the cause of the problem within 24-hours of the alarm, and complete corrective action as soon as practicable, but no later than 10 calendar days from the date of the alarm.

[Authority for term: OAC rule 3745-77-07(A)(1), OAC rule 3745-31-05(D), and 40 CFR Part 63, Subpart EEEEE]

- (7) The permittee shall comply with the applicable operational restrictions necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7710(a)	Operational and maintenance (general)
63.7710(b)	Operational and maintenance (general)
63.7741(b)	Requirements for BLDS

[Authority for term: OAC rule 3745-77-07(A)(1), 40 CFR Part 63, Subpart EEEEE and OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for P083, P084, P085 and P086:
  - a. the total metal melted, in tons;
  - b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the metal melt rate;



- c. the number of hours operated each month;
- d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the operation hours;
- e. the monthly PM, PM10, and PM2.5 fugitive and stack emissions rates; and
- f. the calculated rolling, 12-month summation of PM, PM10, and PM2.5 stack and fugitive emissions, in tons, based on the calculations.

The updated rolling, 12-month summation of the total PM, PM10, and PM2.5 emissions shall include the information for the current month and the preceding eleven calendar months.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative metal melt rate for each calendar month.

[Authority for term: OAC rule 3745-77-07(C) and OAC rule 3745-31-05(D)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 9 inches of water while the emissions units are in operation.

[Authority for term: OAC rule 3745-77-07(C) and OAC rule 3745-31-05(D)]

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

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, 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 the investigation was conducted;
- d. the name(s) 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 in this permit, 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:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across the baghouse 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 permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions units. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D)]

- (4) The permittee must prepare and operate at all times in according to a written operation and maintenance (O&M) plan for the bag leak detection system associated with P083, P084, P085, and P086. A copy of the O&M plan must be maintained at the facility and made available for review upon request. At a minimum, each plan must contain the following information:
  - a. general facility and contact information;
  - b. positions responsible for inspecting, maintaining, and repairing emissions control devices which are employed by P083, P084, P085, and P086;
  - c. description of items, equipment, and conditions that will be inspected, including an inspection schedule for the items, equipment and conditions;
  - d. identity and estimated quantity of the replacement parts that will be maintained in inventory; and
  - e. the specification and requirements contained in Section c)(4) above.



[Authority for term: OAC rule 3745-77-07(C), 40 CFR Part 63, Subpart EEEEE, and OAC rule 3745-31-05(D)]

- (5) In the event that a bag leak detection system alarm is triggered, the permittee shall record the following information:
  - a. date and time of each valid alarm;
  - b. the time the permittee initiated corrective action;
  - c. the corrective action taken; and
  - d. the date on which corrective action was completed.

[Authority for term: OAC rule 3745-77-07(C), 40 CFR Part 63, Subpart EEEEE, and OAC rule 3745-31-05(D)]

- (6) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7740(b), (c)	Monitoring requirements for baghouse
63.7742	Monitoring data to determine continuous compliance
63.7743(a), (c)	Continuous compliance with emission limitations
63.7752(a), (c)	Recordkeeping
63.7753	What form records must be kept in and how long

[Authority for term: OAC rule 3745-77-07(C), 40 CFR Part 63, Subpart EEEEE, and OAC rule 3745-31-05(D)]

e) Reporting Requirements

- (1) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit quarterly deviation (excursion) reports for emissions units P083, P084, P085, and P086 that identify the following:
  - a. all exceedances of the rolling, 12-month summation limitation for total metal melted, in tons, from emission units P083, P084, P085, and P086 combined;
  - b. all exceedances of the rolling, 12-month summation for PM emissions, from emissions units P083, P084, P085, and P086;



- c. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;
- d. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
- e. each incident of deviation described in e)(1)b or e)(1)c where a prompt investigation was not conducted;
- f. each incident of deviation described in e)(1)b or e)(1)c 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
- g. each incident of deviation described in e)(1)b or e)(1)c where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(3)(c)]

- (3) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 63, Subpart EEEEE.

63.7750	Notifications to submit
63.7751(a) – (d)	Compliance reports

[Authority for term: 40 CFR Part 63, Subpart EEEEE]

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:

Combined PM stack and fugitive emissions for P083, P084, P085 and P086 shall not exceed 2.03 tons per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by the summation of stack and fugitive emissions.

*The monthly **stack** emissions shall be based on the following equation:*



$$PM = (P) * (EF) * (\text{ton}/2000 \text{ lbs})$$

where,

PM = PM emissions (monthly)

P = hours of operation (monthly hours of operation as determined in d)(1)c.)

EF = 0.72 lb PM/hr (as determined by the following equation:  $[(0.003 \text{ gr/dscf}) * (\text{lb}/7000) * (28,000 \text{ dscfm}) * (60 \text{ min/hr})]$ )

where,

*28,000 dscfm = air flow established by PTI Application A0051280*

The monthly emissions shall be based on the hourly emission rate determined during the emission testing conducted per f)(3) and the monthly hours of operation.

---

*The monthly **fugitive** emission shall be based on the following equation:*

$$PM = (P) * (EF) * (\text{ton}/2000 \text{ lbs})$$

where,

PM = PM emissions (monthly)

P = metal melt rate (monthly metal rate as determined in d)(1)a.)

EF = 0.90 lb PM/ton metal (WebFIRE, SCC 30400303)

CE = capture efficiency (PTI Application M003259)

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D)]

b. Emissions Limitation:

Combined PM10 stack and fugitive emissions for P083, P084, P085 and P086 shall not exceed 2.02 tons per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by the summation of stack and fugitive emissions.

---

*The monthly **stack** emissions shall be based on the following equation:*

$$PM10 = (P) * (EF) * (\text{ton}/2000 \text{ lbs})$$

where,

PM10 = PM10 emissions (monthly)



P = hours of operation (monthly hours of operation as determined in d)(1)c.)

EF = 0.72 lb PM10/hr (as determined by the following equation:  $[(0.003 \text{ gr/dscf}) * (\text{lb}/7000) * (28,000 \text{ dscfm}) * (60 \text{ min/hr})]$ )

where,

28,000 dscfm = air flow established by PTI Application A0051280

The monthly emissions shall be based on the hourly emission rate determined during the emission testing conducted per f)(3) and the monthly hours of operation.

---

The monthly **fugitive** emission shall be based on the following equation:

PM = (P) \* (EF) \* (1-CE) \* (ton/2000 lbs)

where,

PM10 = PM10 emissions (monthly)

P = hours of operation (monthly hours of operation as determined in d)(1)a.)

EF = 0.86 lb PM10/ton metal (US EPA's PM calculator)

CE = capture efficiency, 98% (PTI Application M0003259)

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D)]

c. Emissions Limitation:

Combined PM2.5 stack and fugitive emissions for P083, P084, P085 and P086 shall not exceed 2.02 tons per rolling, 12-month summation

Applicable Compliance Method:

Compliance with the emission limitation shall be determined by the summation of stack and fugitive emissions.

---

The monthly **stack** emissions shall be based on the following equation:

PM2.5 = (P) \* (EF) \* (ton/2000 lbs)

where,

PM2.5 = PM2.5 emissions (monthly)

P = hours of operation (monthly hours of operation, as determined in d)(1)a.)

EF = 0.72 lb PM2.5/hr (as determined by the following equation:  $[(0.003 \text{ gr/dscf}) * (\text{lb}/7000) * (28,000 \text{ dscfm}) * (60 \text{ min/hr})]$ )



where,

*28,000 dscfm = air flow established by PTI Application A0051280*

The monthly emissions shall be based on the hourly emission rate determined during the emission testing conducted per f)(3) and the monthly hours of operation.

*The monthly **fugitive** emission shall be based on the following equation:*

$$PM_{2.5} = (P) * (EF) * (1-CE) * (\text{ton}/2000 \text{ lbs})$$

where,

PM<sub>2.5</sub> = PM<sub>2.5</sub> emissions (monthly)

P = melt rate (monthly melt rate, as determined in d)(1)a.)

EF = 0.86 lb PM<sub>2.5</sub>/ton metal (US EPA's PM calculator)

CE = capture efficiency, 98% (PTI Application M0003259)

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(D)]

d. Emission Limitation:

PE shall not exceed 12.0 lbs/hr

Applicable Compliance Method:

Compliance shall be determined by the following equation.

$$PE = (\text{throughput}) * (\text{emission factor})$$

where,

throughput = 5.0 tons metal charged/hr (EAC form, submitted with PTI application M0003259)

emission factor = 0.60 lb PM/ton metal (WebFIRE, SCC 30400315)

[Authority for term: OAC rule 3745-17-11(B) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall comply with the applicable testing requirements necessary to demonstrate compliance with under 40 CFR Part 63, Subpart EEEEE.

63.7730	Initial compliance requirements
63.7731(b)	When to conduct subsequent performance tests
63.7732(a),	Test methods used and other procedures to demonstrate initial compliance with the emissions limitations



(d)	
-----	--

[Authority for term: 40 CFR Part 63, Subpart EEEEE]

(3) The permittee shall conduct, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing for P083, P084, P085 and P086 shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of the emissions unit.

b. For P083, P084, P085 and P086 the emission testing shall be conducted to demonstrate compliance with the allowable PM, PM10, and PM2.5 concentration of 0.003 gr/dscf in the exhaust stream.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

PM - 40 CFR Part 60, Appendix A, Methods 1 through 5

PM10/PM2.5 – 40 CFR Part 60, Appendix A, Methods 201 and 202

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by Ohio EPA, Central District Office. Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.

e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to Ohio EPA, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing



procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to Ohio EPA, Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from Ohio EPA, Central District Office.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(D), and 40 CFR Part 63, Subpart EEEEE]

g) Miscellaneous Requirements

- (1) None.