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

Certified Mail

6/17/2011

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
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Al Barbour
CONCAST BIRMINGHAM
PO BOX 76
BIRMINGHAM, OH 44816

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0322000248
Permit Number: P0103665
Permit Type: Renewal
County: Erie

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, Northwest District Office at (419)352-8461or 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-NWDO

Ohio | Environmental Protection Agency

FINAL

Division of Air Pollution Control
Permit-to-Install and Operate
for
CONCAST BIRMINGHAM

Facility ID:	0322000248
Permit Number:	P0103665
Permit Type:	Renewal
Issued:	6/17/2011
Effective:	6/17/2011
Expiration:	6/17/2021

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
CONCAST BIRMINGHAM

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Authorization

Facility ID: 0322000248
Application Number(s): A0017804, A0035573, A0042078
Permit Number: P0103665
Permit Description: PTIO Renewal of the electric induction furnaces
Permit Type: Renewal
Permit Fee: $0.00
Issue Date: 6/17/2011
Effective Date: 6/17/2011
Expiration Date: 6/17/2021
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

CONCAST BIRMINGHAM
14315 STATE RTE 113
Birmingham, OH 44816

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, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

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: P0103665
Permit Description: PTIO Renewal of the electric induction furnaces

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

Emissions Unit ID:	**P003**
Company Equipment ID:	600 kW furnace #4
Superseded Permit Number:	03-13553
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	Elec. Induction Furnace
Superseded Permit Number:	03-0926
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P902**
Company Equipment ID:	Elec. Induction Furnace
Superseded Permit Number:	03-0926
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P903**
Company Equipment ID:	1500 lbs/hr furnace #3
Superseded Permit Number:	03-0926
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P905**
Company Equipment ID:	Brass/bronze furnace
Superseded Permit Number:	03-17268
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, Northwest 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) None.

C. Emissions Unit Terms and Conditions

1. P003, 600 KW Furnace #4

Operations, Property and/or Equipment Description:

600 KW coreless brass and bronze induction furnace #4 with two natural gas fired holding tundishes with baghouse.

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)	2.40 lbs Particulate Emissions (PE)/hr, 10.51 tons PE/yr 0.02 gr/scf [See b)(2)a.] Visible particulate emissions shall not exceed 5% opacity as a 6-minute average from the baghouse. No visible fugitive particulate emissions from the building which houses emission unit P003.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)(3)	See b)(2)b.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) for this emissions unit has been determined to be the use of a baghouse with an outlet grain loading of 0.02 gr/scf.

b. The emission limitation established pursuant to this rule is less stringent than that established by OAC rule 3745-31-05 (BAT).

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

(2) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 baghouse on a weekly basis.

(2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(3) 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 emissions incident; and

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

e) Reporting Requirements

(1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall

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

(2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in term number d)(3) above:

a. all days during which any visible fugitive particulate emissions were observed from the three-side enclosure controlling this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

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:

2.4 lbs PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the manufacturer's guaranteed maximum grain loading concentration (0.02 gr/scf) by the maximum baghouse exhaust rate (14,000 acfm) and converting this value to pounds/hour by multiplying by 60 min/hr and dividing by 7,000 gr/lb. If required, compliance with this limitation shall be based on stack testing using the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-5.

b. Emission Limitation:

10.51 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the pound/hour limitation by the maximum operating schedule of 8,760 hrs/yr and dividing by 2,000 pounds/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

c. Emission Limitation:

0.02 gr/scf

Applicable Compliance Method:

This emission limitation was established using the manufacturer's guaranteed outlet grain loading concentration. If required, compliance with this limitation shall be based on stack testing using the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-5.

d. Emission Limitation:

Visible particulate emissions shall not exceed 5% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

e. Emission Limitation:

No visible fugitive particulate emissions from the building containing emission unit P003.

Applicable Compliance Method:

If required, compliance with the visible emission limitation specified above shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

2. P901, Elec. Induction Furnace

Operations, Property and/or Equipment Description:

0.75 tph Electric Induction Furnace with Baghouse

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)	Combined emissions from emissions units P901, P902 and P903: 1.03 pounds particulate emissions (PE) per hour; 4.51 tons PE per year 0.11 pound fugitive PE per hour; 0.48 ton fugitive PE per year There shall be no visible fugitive emissions from the building which houses emissions unit P901. Visible particulate emissions from the baghouse stack shall not exceed 5 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) for this emissions unit has been determined to be the use of a drop-out box and a baghouse.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

(2) The permittee shall charge only "clean scrap" to emissions units P901, P902 and P903. "Clean scrap" is defined as scrap material that is essentially free of plastics, paints, dirt, oil and greases.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 baghouse on a weekly basis.

(2) 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 and for any visible emissions of fugitive dust 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 emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in term number d)(2) above:

a. all days during which any visible fugitive particulate emissions were observed from the three-side enclosure controlling this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the “Additional Information and Corrections” section of the PER that no visible emissions were observed and no corrective actions were taken.

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>:

Combined particulate emissions from emissions units P901, P902 and P903 of 1.03 lbs PE/hr and 4.51 tons PE/yr

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the manufacturer's guaranteed maximum grain loading concentration (0.02 gr/scf) by the maximum baghouse exhaust rate (6,000 acfm) and converting this value to pounds/hour by multiplying by 60 min/hr and dividing by 7,000 gr/lb. If required, compliance with this limitation shall be based on stack testing using the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-5.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000

lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

b. Emission Limitation:

Combined fugitive emissions from emissions units P901, P902 and P903 of 0.11 lb PE/hr and 0.48 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying an uncontrolled emission rate of 9.09 lbs/hr, applying a 99% (1-0.99) capture efficiency and a safety factor of 1.2.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 5% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

No visible fugitive particulate emissions from the building which houses emissions unit P901.

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation specified above shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

(g) Miscellaneous Requirements

(1) None.

3. P902, Elec. Induction Furnace

Operations, Property and/or Equipment Description:

0.75 tph Electric Induction Furnace with Baghouse

g) 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)	Combined emissions from emissions units P901, P902 and P903: 1.03 pounds particulate emissions (PE) per hour; 4.51 tons PE per year 0.11 pound fugitive PE per hour; 0.48 ton fugitive PE per year There shall be no visible fugitive emissions from the building which houses emissions unit P902. Visible particulate emissions from the baghouse stack shall not exceed 5 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) for this emissions unit has been determined to be the use of a drop-out box and a baghouse.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

(2) The permittee shall charge only "clean scrap" to emissions units P901, P902 and P903. "Clean scrap" is defined as scrap material that is essentially free of plastics, paints, dirt, oil and greases.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 baghouse on a weekly basis.

(2) 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 and for any visible emissions of fugitive dust 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 emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in term number d)(2) above:

a. all days during which any visible fugitive particulate emissions were observed from the three-side enclosure controlling this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the “Additional Information and Corrections” section of the PER that no visible emissions were observed and no corrective actions were taken.

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>:

Combined particulate emissions from emissions units P901, P902 and P903 of 1.03 lbs PE/hr and 4.51 tons PE/yr

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the manufacturer's guaranteed maximum grain loading concentration (0.02 gr/scf) by the maximum baghouse exhaust rate (6,000 acfm) and converting this value to pounds/hour by multiplying by 60 min/hr and dividing by 7,000 gr/lb. If required, compliance with this limitation shall be based on stack testing using the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-5.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000

lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

b. Emission Limitation:

Combined fugitive emissions from emissions units P901, P902 and P903 of 0.11 lb PE/hr and 0.48 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying an uncontrolled emission rate of 9.09 lbs/hr, applying a 99% (1-0.99) capture efficiency and a safety factor of 1.2.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 5% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

No visible fugitive particulate emissions from the building which houses emissions unit P902.

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation specified above shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

4. P903, 1500 lbs/hr furnace #3

Operations, Property and/or Equipment Description:

1500 pounds/hour cooper, brass and bronze electric induction furnace #3 with holding tundish

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)	Combined emissions from emissions units P901, P902 and P903: 1.03 pounds particulate emissions (PE) per hour; 4.51 tons PE per year 0.11 pound fugitive PE per hour; 0.48 ton fugitive PE per year There shall be no visible fugitive emissions from the building which houses emissions unit P903. Visible particulate emissions from the baghouse stack shall not exceed 5 percent opacity as a six-minute average.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)	See b)(2)b.

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) for this emissions unit has been determined to be the use of a drop-out box and a baghouse.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

(2) The permittee shall charge only "clean scrap" to emissions units P901, P902 and P903. "Clean scrap" is defined as scrap material that is essentially free of plastics, paints, dirt, oil and greases.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 baghouse on a weekly basis.

(2) 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 and for any visible emissions of fugitive dust 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 emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in term number d)(2) above:

a. all days during which any visible fugitive particulate emissions were observed from the three-side enclosure controlling this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the “Additional Information and Corrections” section of the PER that no visible emissions were observed and no corrective actions were taken.

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>:

Combined emissions from emissions units P901, P902 and P903 of 1.03 lbs PE/hr and 4.51 tons PE/yr

<u>Applicable Compliance Method</u>:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the manufacturer's guaranteed maximum grain loading concentration (0.02 gr/scf) by the maximum baghouse exhaust rate (6,000 acfm) and converting this value to pounds/hour by multiplying by 60 min/hr and dividing by 7,000 gr/lb. If required, compliance with this limitation shall be based on stack testing using the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-5.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000

lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

b. Emission Limitation:

Combined fugitive emissions from emissions units P901, P902 and P903 of 0.11 lb PE/hr and 0.48 ton PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying an uncontrolled emission rate of 9.09 lbs/hr, applying a 99% (1-0.99) capture efficiency and a safety factor of 1.2.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 5% opacity as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

No visible fugitive particulate emissions from the building which houses emissions unit P903.

Applicable Compliance Method:

Compliance with the visible emission limitation specified above shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

5. P905, Brass/bronze furnace

Operations, Property and/or Equipment Description:

600 KW inductrotherm coreless brass and bronze induction furnace no. 5, and two natural gas-fired holding tundishes, with baghouse

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)	See b)(2)a. 3.4 lbs particulate matter 10 microns or smaller in diameter (PM10)/hour and 15.02 tons PM10/year. There shall be no visible fugitive emissions from the building which houses emissions unit P903. Visible particulate emissions from the baghouse stack shall not exceed 5 percent opacity as a six-minute average.
b.	OAC rule 3745-17-11(B)	6.19 lbs particulate emissions (PE)/hr; See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)b.

d.	OAC rule 3745-17-07(B)	This emission unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
e.	OAC rule 3745-17-08(B)	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) for this emissions unit has been determined to be the use of a baghouse.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

(2) The permittee shall charge only “clean scrap” to emissions units P901, P902 and P903. “Clean scrap” is defined as scrap material that is essentially free of plastics, paints, dirt, oil and greases.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. 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 baghouse on a weekly basis.

(2) 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 and for any visible emissions of fugitive dust 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 emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)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) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(2) The permittee shall additionally identify the following information in the annual PER in accordance with the monitoring requirements in term number d)(2) above:

a. all days during which any visible fugitive particulate emissions were observed from the three-side enclosure controlling this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or corrective action(s) to identify as required above, the permittee shall indicate within the “Additional Information and Corrections” section of the PER that no visible emissions were observed and no corrective actions were taken.

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>:

3.4 lbs PM10/hour and 15.02 tons PM10/year.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation by multiplying the maximum outlet concentration of 0.02 grains PM10/dscf by a maximum volumetric air flow of 20,000 acfm, and applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1acfm, and 60 minutes/hr. (All emissions of particulate matter are PM10). If required, compliance with this limitation shall be based on stack testing using the methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-5.

The annual limitation was developed by multiplying the hourly emissions rate by a maximum annual operating schedule of 8760 hours and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with hourly emission rate, compliance with the annual limitation is assumed.

b. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 5 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

No visible fugitive particulate emissions from the building which houses emissions unit P905.

Applicable Compliance Method:

Compliance with the visible emission limitation specified above shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.