John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

3/3/2014

Certified Mail

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

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0215010001
Permit Number: P0116361
Permit Type: Administrative Modification
County: Columbiana

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) 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. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTIO 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
77 South High Street, 17th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-NEDO

FINAL

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

Facility ID:	0215010001
Permit Number:	P0116361
Permit Type:	Administrative Modification
Issued:	3/3/2014
Effective:	3/3/2014
Expiration:	3/12/2017

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

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Authorization

Facility ID:	0215010001
Application Number(s):	M0002638
Permit Number:	P0116361
Permit Description:	Agency-initiated administrative modification to correct EU IDs that were named or overwritten incorrectly by recent permits.
Permit Type:	Administrative Modification
Permit Fee:	$0.00
Issue Date:	3/3/2014
Effective Date:	3/3/2014
Expiration Date:	3/12/2017

Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

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

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0116361
Permit Description: Agency-initiated administrative modification to correct EU IDs that were named or overwritten incorrectly by recent permits.

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

Emissions Unit ID:	**F012**
Company Equipment ID:	Core Making
Superseded Permit Number:	P0110199
General Permit Category and Type:	Not Applicable

Group Name: Electric Induction Furnaces

Emissions Unit ID:	**F013**
Company Equipment ID:	EIF#1
Superseded Permit Number:	P0110199
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**F014**
Company Equipment ID:	EIF #2
Superseded Permit Number:	
General Permit Category andType:	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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 taken by 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 of this permit 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 [DO/LAA] 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 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 emission 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 beingpermanently shut down without first applying for and obtaining a permit pursuantto OAC Chapter 3745-31.

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

      (1) None.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   a) Emission Limitations:

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

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

   Applicable Compliance Method:

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

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

C. Emissions Unit Terms and Conditions

1. F012, Core Making

Operations, Property and/or Equipment Description:

Core making includes 4 Shalco machines, oil core making, oil core oven, phenolic urethane core making (Pep-set and Air Set), core wash, and core and mold release.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. None.

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.
b.	OAC rule 3745-17-08(B)(3)	See b)(2)a.
c.	OAC rule 3745-31-05(D)(1)(b)	Particulate emissions less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 0.91 ton per rolling, 12 month period. Volatile organic compound (VOC) emissions shall not exceed 45 tons per rolling, 12-month period.

(2) Additional Terms and Conditions

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

c) Operational Restrictions

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

(2) The maximum throughput of sand shall not exceed 4.0 tons per hour.

d) Monitoring and/or Recordkeeping Requirements

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

a. the operating hours for each month;

b. the total amount of sand used, in tons;

c. the average amount of sand used per hour each month, calculated by dividing (b) by (a);

d. the VOC content of each binder and resin used; and

e. the total amount of binders and resins used, in pounds.

(2) The permittee shall record the following information for each month of operation, on a rolling, 12-month basis for this emissions unit:

a. the cumulative hours of operation over the past 12 months;

b. the cumulative amount of sand used over the past 12 months, in tons;

c. the average amount of sand used per hour over the past 12 months, calculated by dividing (b) by (a);

d. the VOC content of each binder and resin used over the past 12 months; and

e. the total amount of binders and resins used over the past 12 months, in pounds.

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

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

where:

E = emission rate for PM_{10}, in tons per rolling, 12-month period;

EF = emission factor for PM_{10} is 0.091 lb PM_{10}/ton sand *;

S = amount of sand used per hour, as calculated in d)(2)c; and

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

* Emission Factor of 0.35 lb PE/ton cores produced is from RACM Table 2.7-1. No Emission Factor found for PM_{10}. However, Table A-1 of AP-42 (2/72) provides a percentage distribution by size of particles from selected sources without control equipment. PM_{10} emissions from a "gray iron foundry" are reported at 26%. Assumption is made that we can use reported proportions (26% < 10 microns, 74% > 10 microns) and apply to proportions of controlled emissions.

Calculation: (0.26)(0.35 lb PE/ton cores) = 0.091 lb PM_{10}/ton cores

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

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

where:

E = emission rate for VOC, in tons per rolling, 12-month period;

EF = emission factor for VOC in lbs VOC/ton sand, is calculated by dividing the amount of binders and resins used over the past 12 months, in pounds (as recorded in d)(2)d) by the amount of sand used over the past 12 months, in tons (as recorded in d)(2)b), and then multiplying by the VOC content of binders and resins used;

S = amount of sand used per hour, as calculated in d)(2)c; and

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

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

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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

e) Reporting Requirements

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

a. each month when the cumulative total number of operating hours exceeded 5,000 hours on a rolling, 12-month basis;

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

c. each month when the average sand usage exceeded 4.0 tons per hour.

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

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

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

f) Testing Requirements

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

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

Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

b. Emission Limitation:

PM_{10} emissions shall not exceed 0.91 ton per rolling, 12 month period.

Applicable Compliance Method:

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

c. Emission Limitation:

VOC emissions shall not exceed 45 tons per rolling, 12-month period.

Applicable Compliance Method:

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

d. Operational Restriction:

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

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d)(2)a.

e. Operational Restriction:

The maximum throughput of sand shall not exceed 4.0 tons per hour.

Applicable Compliance Method:

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

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

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group - Electric Induction Furnaces: F013, F014

EU ID	Operations, Property and/or Equipment Description
F013	Electric Induction Furnace #1 for grey iron melting.
F014	Electric Induction Furnace #2 for grey iron melting.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)(1)	Fugitive visible particulate emissions from this emissions unit shall not exceed 20% opacity as a 3-minute average.
b.	OAC rule 3745-17-08(B)	See b)(2)a below.
c.	OAC rule 3745-31-05(D)(1)(b)	Particulate matter emissions less than or equal to 10 microns in diameter (PM_{10}) from this emissions unit shall not exceed 4.0 tons per rolling, 12-month period. Lead emissions shall not exceed 0.26 ton per rolling 12-month period.
d.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Particulate emissions (PE) shall not exceed 4.19 tons per year. See b)(2)c.
e.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)d.

(2) Additional Terms and Conditions

a. Reasonably available control measures (RACM) shall be employed to minimize fugitive particulate emissions. RACM shall include, but not be limited to, the melting of only certified-metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics or organic liquids.

b. The electric induction furnace shall be equipped with a cover or lid and kept closed except during periods of charging and tapping.

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001 in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 33745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revised rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emissions limit/control measures no longer apply.

d. This paragraph applies once U.S. EPA approves the December 1. 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c) Operational Restrictions

(1) The output melting rate for this emissions unit shall not exceed 3.0 tons of metal per hour per electric induction furnace.

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

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

d) Monitoring and/or Recordkeeping Requirements

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

a. the operating hours for each month;

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

c. the amount of metal charged, in tons;

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

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

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

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

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

where:

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

EF = emission factor for controlled PM_{10} is 0.86 lbs PM_{10}/ton metal *;

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

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

* Emission factor of 0.86 lb PM_{10}/ton metal melted, derived from AP-42, Section 12.10, Table 12.10-3 (1/95) particulate emission factor of 0.9 lb/ton metal melted, of which 95% is assumed to be PM_{10}.

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

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

where:

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

EF = emission factor for controlled lead is 0.0545 lb lead/ton metal *;

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

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

* Emission factor of 0.0545 lb lead/ton metal melted, from AP-42, Section 12.10, Table 12.10-5 (1/95) lead emission factor.

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

The permittee shall record the following information:

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

b. inspection findings of the purchased material;

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

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

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

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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

e) Reporting Requirements

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

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

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

c. the month when the average pouring rate exceeded 3.0 tons metal per hour.

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

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

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

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

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

f) Testing Requirements

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

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

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

<u>Applicable Compliance Method</u>:

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

b. Emission Limitation:

PM_{10} emissions shall not exceed 4.0 tons per rolling, 12-month period.

Applicable Compliance Method:

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

c. Emission Limitation:

PE shall not exceed 4.19 tons per year.

Applicable Compliance Method:

Compliance with the above emission limitation shall be demonstrated based upon an AP-42, Section 12.10-3 (1/95) particulate emission factor of 0.9 lb/ton metal melted, multiplied by the annual production limit of 3,100 tons per year of metal melted and the conversion factor 1.0 ton/2,000 lbs.

d. Emission Limitation:

Lead emissions shall not exceed 0.26 ton per rolling, 12-month period.

Applicable Compliance Method:

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

g) Miscellaneous Requirements

(1) None.