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

Certified Mail

2/7/2012

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

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0215010001
Permit Number: P0108782
Permit Type: OAC Chapter 3745-31 Modification
County: Columbiana

Dear Permit Holder:

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

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now.If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

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

Cc: U.S. EPA Region 5*Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; West Virginia

Permit Strategy Write-Up

1. Check all that apply:

   _X_Synthetic Minor Determination

   Netting Determination

2. **Source Description:** Col-Pump Company, Inc. produces gray iron castings. The facility consists of two cupolas (P901 and P902), sand handling and mold making (F007), core making (F012), two shakeout unit (F008), pouring and cooling (F009), four casting paint dip tanks (K001 and K002), 11 grinding stations (P004) and two enclosed shotblast units (P003 and P005). All operating emissions units are included in the FEPTIO, except the deminimisunits, however the emissions from the deminimis units are accounted for in the facility-wide emission calculations.

3. **Facility Emissions and Attainment Status:** The location of the facility is currently designated as attainment for all criteria pollutants. Col-Pump is a potential major source for PE, PM10, and VOC emissions.

4. **Source Emissions:** This permit restricts emissions of PM10, VOCs, and HAPs from the facility to below Title V thresholds by limiting the throughput and operating hours for core making and limiting the production rate for grinding. This Chapter 31 Modification is to increase the throughput for core making (increasing the allowables for PM10 and VOCs) and to account for an additional grinding station (increasing the allowable for PM10).

5. **Conclusion:** Through the limits listed above and the use of control equipment, Col-Pump Company, Inc.'s potentials to emit for PE, PM10, VOC, and HAP emissions will be limited to below the Title V threshold.

6. Please provide additional notes or comments as necessary:

   None

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

Pollutant	Tons Per Year
PM10	1.61
VOC	45
Individual HAP	9.9
Combined HAPs	24.9

PUBLIC NOTICE
2/7/2012 Issuance of Draft Air Pollution Permit-To-Install and Operate

COL-PUMP COMPANY, INC.
131 EAST RAILROAD ST,
Columbiana, OH 44408
Columbiana County
FACILITY DESC.: Iron Foundries
PERMIT #: P0108782
PERMIT TYPE: OAC Chapter 3745-31 Modification
PERMIT DESC: Modification to increase maximum throughput of sand for core making resulting in an increase in allowables for PM 10 and VOCs; and to account for an additional uncontrolled grinding station not included in the original permit which resulted in an increase in the allowable for PM10.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the permit # or: Megan Talcott, Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087. Ph: (330)425-9171

Ohio | Environmental Protection Agency

DRAFT

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

Facility ID:	0215010001
Permit Number:	P0108782
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	2/7/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

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): A0041712
Permit Number: P0108782
Permit Description: Modification to increase maximum throughput of sand for core making resulting in an increase in allowables for PM 10 and VOCs; and to account for an additional uncontrolled grinding station not included in the original permit which resulted in an increase in the allowable for PM10.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $1,500.00*DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 2/7/2012
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

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

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108782
Permit Description: Modification to increase maximum throughput of sand for core making resulting in an increase in allowables for PM 10 and VOCs; and to account for an additional uncontrolled grinding station not included in the original permit which resulted in an increase in the allowable for PM10.

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:	P0084315
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	Grinding
Superseded Permit Number:	P0084315
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

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

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is 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 will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

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

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

$E = EF \times S \times H \times ton/2{,}000\ lbs$

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. P004, Grinding

Operations, Property and/or Equipment Description:

11 grinding stations, 9 controlled by HEPA filters

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

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 0.70 ton 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 from the grinder that exhausts directly to the plant interior. RACM shall include, but not be limited to, containing operations within the building and using good engineering practices.

c) Operational Restrictions

(1) When a grinder equipped with a HEPA filter is in operation, the HEPA filter shall also be in operation.

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

d) Monitoring and/or Recordkeeping Requirements

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

a. the total hours of operation;

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

c. the average, monthly production rate for this emissions unit, in tons per hour, calculated by dividing (b) by (a); and

d. the day and time when a grinder equipped with a HEPA filter was in operation and the HEPA filter was not in operation.

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

a. the total hours of operation;

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

c. the average, yearly production rate for this emissions unit, in tons per hour, calculated by dividing (b) by (a); and

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

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

where:

E = emission rate of PM_{10}, in tons per year;

EF = emission factor for PM_{10} is 0.168 lb PM_{10}/ton metal *;

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

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

CE = control efficiency of HEPA filter expressed as a decimal is 0.81.

* Emission Factor of 0.168 lb PM_{10}/ton metal is based on test data, without controls.

(3) 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. each month when the average production rate exceeded 5.02 tons of metal per hour; and

b. the date and time when a grinder equipped with a HEPA filter was in operation and the HEPA filter was not in operation.

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. Emission Limitation:

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 0.70 ton per rolling, 12 month period.

Applicable Compliance Method:

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

c. Operational Restriction:

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