



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

8/3/2016

Certified Mail

Mr. Gary Hantz
 ALCON INDUSTRIES, INC.
 7990 Baker Avenue
 Cleveland, OH 44102

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	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

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

Facility ID: 1318007755
 Permit Number: P0119537
 Permit Type: Renewal
 County: Cuyahoga

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 Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Plain Dealer. 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 "Search for Permits" link under the Permitting topic on the Programs tab. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall Permit Review/Development Section Ohio EPA, DAPC 50 West Town Street Suite 700 PO Box 1049 Columbus, Ohio 43216-1049	and	Cleveland Division of Air Quality 2nd Floor 75 Erieview Plaza Cleveland, OH 44114
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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 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 Cleveland Division of Air Quality at (216)664-2297.

Sincerely,

Michael E. Hopkins, P.E.
 Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
 CDAQ; Pennsylvania; Canada

Permit Strategy Write-Up

1. Check all that apply:

Synthetic Minor Determination (renewal FEPTIO to avoid Title V)

Netting Determination

2. Source Description:

Alcon is a grey iron foundry. They cast heat and corrosion-resistant alloy cores 0.5 - 1,500 pounds employing green sand, no-bake, and centrifugal processes. This renewal permit contains emissions units P009, P010, P016, P020, and combined units P002 and P003.

3. Facility Emissions and Attainment Status:

Facility emissions reported for 2014:

Pollutant	Allowable TPY	Actual TPY (2014)
PE	44.07	10.04
VOC	10.78	2.18
OC	47.5	10.16
HAP	8.05	≤ 2.18

- Facility reported 20-30 ton range for 2014.

- Cuyahoga County is currently out of attainment for PM_{2.5}, Lead, and 8-Hour Ozone.

4. Source Emissions:

Pollutant	EU	Description	Status	Allowable
				TPY
PE	P009	Pouring and cooling operation	Active	5.63
	P010	Wheelbarator blast abrasion	Active	0.56
	P016	Palmer	Active	0.78
	P020	Shakeout system	Active	35.6
	P002/3	Gaylords	Active	0.43
VOC	P016	Palmer	Active	2.9
	P002/3	Gaylords	Active	5.15
OC	P002/3	Gaylords	Active	47.5
HAP	P016	Palmer	Active	2.9
	P002/3	Gaylords	Active	5.15

Toxic Contaminants: 2-Phenoxy-Ethanol, Methanol

5. Conclusion:

Restrict operating hours of P009, P010, and P016 to $\leq 3,276$ hours per year. Restrict yearly resin usage of P016 to $\leq 95,000$ pounds. Restrict the yearly usages of resin to $\leq 23,000$ pounds, hardener $\leq 100,000$ pounds, and sand $\leq 16,000,000$ pounds for the combined throughputs of P002 and P003.

Daily and monthly recordkeeping required for PE, OC, VOC, HAP, use of sand, resin, and hardener, and operating hours.

6. Please provide additional notes or comments as necessary:

Restrictions on the combined throughput and emissions of P002 and P003 are inflated because they are identical to the limits for the combination of P002, P003, and P015. EU P015 was shut down on 7/31/2012.

In this renewal, the facility requested daily emissions limitations to replace their hourly restrictions for EUs P009, P010, and P020.

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	44.07
VOC	10.78
OC	47.5
HAP	8.05

PUBLIC NOTICE

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

Draft Air Pollution Permit-to-Install and Operate Renewal
ALCON INDUSTRIES, INC.

7990 BAKER AVE., CLEVELAND, OH 44102

ID#:P0119537

Date of Action: 8/3/2016

Permit Desc:Renewal FEPTIO for emissions units P002 and P003 (Gaylord sand core making units), P009 (Pouring and cooling operation), P010 (Wheelabrator operation), P013 (Sand storage silo), P016 (Palmer mold making unit) and P020 (Shakeout Sand, Metal & Core Separation)..

The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the ID # or: David Hearne, Cleveland Division of Air Quality, 2nd Floor 75 Erievue Plaza, Cleveland, OH 44114. Ph: (216)664-2297



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
ALCON INDUSTRIES, INC.**

Facility ID:	1318007755
Permit Number:	P0119537
Permit Type:	Renewal
Issued:	8/3/2016
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
ALCON INDUSTRIES, INC.

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Draft Permit-to-Install and Operate

ALCON INDUSTRIES, INC.

Permit Number: P0119537

Facility ID: 1318007755

Effective Date: To be entered upon final issuance

Authorization

Facility ID: 1318007755
Application Number(s): A0054202, A0055998
Permit Number: P0119537
Permit Description: Renewal FEPTIO for emissions units P002 and P003 (Gaylord sand core making units), P009 (Pouring and cooling operation), P010 (Wheelabrator operation), P013 (Sand storage silo), P016 (Palmer mold making unit) and P020 (Shakeout Sand, Metal & Core Separation).
Permit Type: Renewal
Permit Fee: \$0.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 8/3/2016
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:

ALCON INDUSTRIES, INC.
7990 BAKER AVE.
CLEVELAND, OH 44102

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:

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

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: P0119537

Permit Description: Renewal FEPTIO for emissions units P002 and P003 (Gaylord sand core making units), P009 (Pouring and cooling operation), P010 (Wheelabrator operation), P013 (Sand storage silo), P016 (Palmer mold making unit) and P020 (Shakeout Sand, Metal & Core Separation).

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

- | | |
|-----------------------------------|---|
| Emissions Unit ID: | P009 |
| Company Equipment ID: | Pouring and Cooling Operation. |
| Superseded Permit Number: | P0094807 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | P010 |
| Company Equipment ID: | Wheelabrator, blasting, and cleaning operation. |
| Superseded Permit Number: | P0094807 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | P013 |
| Company Equipment ID: | Sand storage silo and associated dust collector |
| Superseded Permit Number: | P0105730 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | P016 |
| Company Equipment ID: | Palmer |
| Superseded Permit Number: | P0111675 |
| General Permit Category and Type: | Not Applicable |
| Emissions Unit ID: | P020 |
| Company Equipment ID: | Shakeout System |
| Superseded Permit Number: | 13-04715 |
| General Permit Category and Type: | Not Applicable |

Group Name: Gaylords

Emissions Unit ID:	P002
Company Equipment ID:	Gaylord SATB-30
Superseded Permit Number:	P0111676
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P003
Company Equipment ID:	Gaylord 30a
Superseded Permit Number:	P0111676
General Permit Category and Type:	Not Applicable



Draft Permit-to-Install and Operate
ALCON INDUSTRIES, INC.
Permit Number: P0119537
Facility ID: 1318007755
Effective Date: To be entered upon final issuance

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 Cleveland Division of Air Quality 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 being permanently shut down without first applying for and obtaining a permit pursuant to 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.



Draft Permit-to-Install and Operate
ALCON INDUSTRIES, INC.
Permit Number: P0119537
Facility ID: 1318007755
Effective Date: To be entered upon final issuance

B. Facility-Wide Terms and Conditions



Draft Permit-to-Install and Operate

ALCON INDUSTRIES, INC.

Permit Number: P0119537

Facility ID: 1318007755

Effective Date: To be entered upon final issuance

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.
2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZZ, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries Area Sources. At this time the Ohio EPA is not accepting the delegating authority to enforce NESHAP standards for area sources. The requirements of this rule, that are applicable to the area sources (for hazardous air pollutants) identified in this permit, shall be enforceable by U.S. EPA, Region 5. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic code of Federal Regulations (e-CFR) website <http://www.ecfr.gov/> or by contacting the Cleveland Division of Air Quality (Cleveland DAQ).



Draft Permit-to-Install and Operate
ALCON INDUSTRIES, INC.
Permit Number: P0119537
Facility ID: 1318007755
Effective Date: To be entered upon final issuance

C. Emissions Unit Terms and Conditions



1. P009, Pouring and cooling operation located in the Centrifugal Foundry

Operations, Property and/or Equipment Description:

Pouring and cooling operation located in the Centrifugal Foundry

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-04595, issued 6/6/2006 and PTIO P0094807, issued 3/2/2011.)	Fugitive dust emissions shall not exceed 82.6 pounds per day (lbs/day) and 5.63 tons per year (TPY) of particulate matter (PM). Visible emissions of fugitive dust shall not exceed 10% opacity as a 3-minute average.
b.	OAC rule 3745-17-07(B)(1)	The visible fugitive dust emission limitation specified by this rule is less stringent than the visible fugitive dust emission limitation established pursuant to OAC rule 3745-31-05(A)(3).



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-08(B)	Reasonably available control measures to minimize or eliminate visible particulate emissions of fugitive dust. See b)(2)a. below.

(2) Additional Terms and Conditions

a. No control measures are required for this emissions unit.

c) Operational Restrictions

(1) The maximum annual operating hours for this emissions unit shall not exceed 3,276 hours.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain daily records of the number of hours this emissions unit was in operation.

(2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, 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 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 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) 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) 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.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall identify the following information in the annual PER in accordance with terms d)(1) and d)(2) above:
 - a. any exceedance of the annual limitation on the hours of operation;
 - b. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - c. any corrective actions taken to minimize or eliminate the visible emissions.

f) Testing Requirements

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

Fugitive dust emissions shall not exceed 82.6 lbs/day of PM.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 12.10, Table 12.10-7 (1/95) for PM for the scrap charge handling and heating operation (4.2 lbs/ton of material charged) and the max process weight rate of the scrap charge handling and heating operation (0.82 ton/hr).
 - b. Emission Limitation:

Fugitive dust emissions shall not exceed 5.63 TPY of PM.



Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in section f)(1)a. above by the max process weight rate of the scrap charge handling and heating operation (0.82 ton/hr), the actual hours of operation (hrs), and the factor (1 ton/2,000 lbs).

c. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 10% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

g) Miscellaneous Requirements

- (1) This emissions unit was installed on 6/6/2006.



2. P010, Wheelabrator blast abrasion cleaning and finishing operation located in the Centrifugal Foundry.

Operations, Property and/or Equipment Description:

Wheelabrator blast abrasion cleaning and finishing operation located in the Centrifugal Foundry.

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-04595, issued 6/6/2006 and PTIO P0094807, issued 3/2/2011.)	Particulate emissions (PE) shall not exceed 8.2 pounds per day (lbs/day) and 0.56 ton per year (TPY) from the stack serving this emissions unit. Visible PE shall not exceed 10% opacity, as a 6-minute average.
b.	OAC rule 3745-17-07(A)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

- (2) Additional Terms and Conditions
 - a. None.
- c) Operational Restrictions
 - (1) The pressure drop across the torit dust collector shall be maintained within the range of 1.0 to 6.0 inches of water, while the emissions unit is in operation.
 - (2) The maximum annual operating hours for this emissions unit shall not exceed 3,276 hours.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the torit dust collector 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 torit dust collector once per day.
 - (2) The permittee shall maintain daily records of the number of hours this emissions unit was in operation.
- e) Reporting Requirements
 - (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (3) The permittee shall identify the following information in the annual PER in accordance with terms d)(1) and d)(2) above:
 - a. all periods of time during which the pressure drop for the torit dust collector did not comply with the allowable range specified in c)(1); and
 - b. any exceedance of the annual limitation on the hours of operation.
- f) Testing Requirements
 - (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

PE shall not exceed 8.2 lbs/day from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance may be determined by multiplying an assumed PE grain loading emission factor of 0.02 grain per dry standard cubic foot (gr/dscf) from the torit dust collector outlet* by the torit dust collector's rated exhaust flow rate of 2,000 dscf/min, multiplying by 60 min/hr, multiplying by 24 hr/day, and dividing by 7,000 gr/lb.

*The grain loading emission factor is based upon the baghouse manufacturer's design filtering efficiency.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with methods 1 – 5 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

PE shall not exceed 0.56 TPY from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined by multiplying the calculated emission rate for PE from section f)(1)a. above by the actual annual hours of operation and the factor (1 ton/2,000 lbs).

c. Emission Limitation:

Visible PE shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible PE shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

- (1) This emissions unit was installed on 6/1/2006.



3. P013, Sand storage silo and associated dust collector

Operations, Property and/or Equipment Description:

Sand storage silo and associated dust collector

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-04595, issued 6/6/2006 and PTIO P0105730, issued 6/4/2010.)	57.6 lb/day and 10.5 TPY of PE/PM ₁₀ (stack emissions). Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average. See c)(1).
b.	OAC rule 3475-17-07(A)(1)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. For the purposes of this restriction, all particulate emissions are assumed to be equivalent to or greater than PM₁₀ emissions.

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.

d) Monitoring and/or Recordkeeping Requirements

(1) The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications, until such time as any required performance testing is conducted and an alternative pressure drop range and/or limit is established.

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

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

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

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

- (3) This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (CDAQ). The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

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 identify in the annual permit evaluation report the following information concerning the operations of the baghouse during the 12-month reporting period for this/these emissions unit(s):
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

- c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
- (3) each incident of deviation described in “a” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- 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:
57.6 lb/day of PE/PM₁₀

Applicable Compliance Method:
Compliance shall be determined by multiplying the emission factor specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 12.10, Table 12.10-7 (1/95) for particulate emissions for sand handling (3.6 lbs/ton of sand handled), the maximum unloading rate to the silica sand storage silo (tons/hr) and the control efficiency of the dust collector (1-0.99).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).
 - b. Emission Limitation:
10.5 TPY of PE/PM₁₀(stack emissions)

Applicable Compliance Method:
Compliance shall be determined by multiplying the tons of sand handled per year by the AP-42 emission factor of 3.6 lbs/ton of sand handled, multiplied by the control efficiency of the dust collector (1-0.99), multiplied by the factor 1 ton/2,000 lbs.
 - c. Emission Limitation:
Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
 - d. Compliance shall be determined through visible emission observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).



g) Miscellaneous Requirements

- (1) This emissions unit was installed in October 2007.

4. P016, Palmer mold making unit located in the static foundry.

Operations, Property and/or Equipment Description:

Palmer mold making unit located in the static foundry.

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

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

- a. d)(6), d)(7), d)(8), and e)(4).

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-04715, issued 9/17/2010 and PTIO P0111675, issued 2/21/2013.)	Particulate emissions (PE) shall not exceed 14.4 pounds per day (lbs/day) and 2.63 tons per year (TPY) from the stack serving this emissions unit. Volatile organic compound (VOC) emissions shall not exceed 82.0 pounds per day (lbs/day) from the stack serving this emissions unit. Visible PE from the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average. See b)(2)a. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Title V)	VOC/hazardous air pollutant (HAP) emissions shall not exceed 2.9 TPY, based on a rolling, 12-month summation of the VOC emissions. See b)(2)b. and c)(1) below.
c.	OAC rule 3745-17-07(A)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to the baghouse during loading of sand into hopper.
- b. The emissions of VOC/HAP from this emissions unit shall not exceed 2.9 tons per year, based upon a rolling 12-month summation of the VOC emissions.

c) Operational Restrictions

- (1) The maximum annual usage rate of resin shall not exceed 95,000 pounds based on a rolling, 12-month summation of the usage rates.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall calculate and maintain monthly records of the VOC emissions and the rolling 12-month emissions of VOC.
- (2) The permittee shall collect and record the following information each day when operating the emissions unit:
 - a. the number of sand molds produced by this emissions unit;
 - b. the amount, in pounds, of sand used during each day;
 - c. the amount, in pounds, of resin used during each day;
 - d. the number of hours of operation for each day; and

- e. the total VOC emission rate from resin used, in pounds per day.
- (3) The permittee shall collect and record the amount, in pounds, of resin used on a monthly basis for the purpose of determining annual usage.
- (4) The acceptable range for the pressure drop across the baghouse shall be based upon the manufacturer's specifications, until such time as any required performance testing is conducted and an alternative pressure drop range and/or limit is established.
- (5) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit is in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable pressure drop shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range is established to demonstrate compliance.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations

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

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;

- j. the pressure drop readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality (Cleveland DAQ). The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable PE rate for the controlled emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (6) The PTIO application for this emissions unit, P016, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from this permit application; and modeling was performed for each toxic air contaminant emitted at over one TPY using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. The exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions unit, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (threshold limit value (TLV) was and shall be used, if the chemical is listed):
 - i. TLV from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
 - ii. Short term exposure limit (STEL) or the ceiling value from the ACGIH Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit, i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the MAGLC:

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminant(s) (emitted at 1 or more TPY) or “worst case” toxic contaminant(s):

Toxic Contaminant: Methanol

TLV (mg/m³): 262.9

Maximum Hourly Emission Rate (lbs/hr): 2.24

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 341.82

MAGLC (ug/m³): 6,240.14

The permittee has demonstrated that emissions of Methanol from emissions unit P016 is calculated to be less than eighty percent of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

- (7) Prior to making any physical changes to or changes in the method of operation of the emissions unit that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level

concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changes for any re-evaluation of the toxic modeled (the composition of materials, new toxic compounds emitted, change in stack/exhaust parameters, etc.);
- b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
- c. a copy of the computer model run(s) that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit or the materials applied.

e) Reporting Requirements

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping, and/or testing requirements in this permit:
 - i. all exceedances of the rolling 12-month emission limitation for VOC; and
 - ii. all exceedances of the rolling 12-month usage limitation of resin.
- b. the probable cause of each deviation (excursion);
- c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
- d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Cleveland DAQ.

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
 - (4) The permittee shall identify in the annual PER the following information concerning the operations of the baghouse during the 12-month reporting period for this unit:
 - a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the range specified by the manufacturer and outside of the acceptable range following any required compliance demonstration;
 - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted;
 - d. each incident of deviation described in “a” where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was not determined to be necessary and was not taken; and
 - e. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or corrective action(s), as identified in the monitoring and recordkeeping requirements of this permit.
 - (5) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual PER. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:



a. Emission Limitation:

PE shall not exceed 14.4 lbs/day from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 12.10, Table 12.10-7 (1/95) for PE for the sand handling operation (1.1 lbs/ton of sand handled) by the max process weight rate for the sand handled per hour, and by the static dust collector efficiency (1-0.98).

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).

b. Emission Limitation:

PE shall not exceed 2.63 TPY from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined by multiplying the calculated emission rate for PE from section f)(1)a. above by the actual annual hours of operation and the factor 1 ton/2,000 lbs).

c. Emission Limitation:

VOC emissions shall not exceed 82.0 lbs/day from the stack serving this emissions unit.

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in d)(1) and d)(2).

d. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

VOC/HAP emissions shall not exceed 2.9 TPY, based on a rolling, 12-month summation of the VOC emissions.



Draft Permit-to-Install and Operate

ALCON INDUSTRIES, INC.

Permit Number: P0119537

Facility ID: 1318007755

Effective Date: To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in d)(1) and d)(2).

The permittee shall sum the total monthly VOC/HAP emissions each month, for that month and the previous 11 months, as a rolling, 12-month summation.

g) Miscellaneous Requirements

- (1) This emissions unit was installed in 2000.
- (2) A replacement control device, Steelcraft Filtrex 2 cartridge dust collector, was installed in March 2016.



5. P020, Shakeout Sand, Metal & Core Separation System - separation of metal and cores from sand and sand recycling. Shakeout System is located in the Static Foundry.

Operations, Property and/or Equipment Description:

Shakeout Sand, Metal & Core Separation System - separation of metal and cores from sand and sand recycling. Shakeout System is located in the Static Foundry.

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

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) (FEPTIO #13-04715, issued 9/17/2010.)	Fugitive particulate emissions (PE) shall not exceed 520.8 pounds per day (lbs/day).
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Title V).	Fugitive PE shall not exceed 35.6 tons per year (TPY), based on a rolling, 12-month summation. See c)(1) below.
c.	OAC rule 3745-17-07(B)(1)	Visible emissions of fugitive dust from this emissions unit shall not exceed 10% opacity, as a 3-minute average.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(B)(3)	<p>The permittee shall employ reasonably available control measures to minimize or eliminate visible particulate emissions of fugitive dust.</p> <p>See b)(2)a. below.</p>

(2) Additional Terms and Conditions

- a. The permittee shall employ the following reasonably available control measures for the purpose of minimizing or eliminating visible fugitive emissions from this emissions unit:
 - i. adequate moisture content; and
 - ii. minimize drop distance.

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 3,276 hours, based upon a rolling, 12-month summation of the operating hours.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records of the following information:
 - a. the number of hours this emissions unit was in operation for each day; and
 - b. the rolling, 12-month summation of the operating hours.
- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, 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 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 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) 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 were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping, and/or testing requirements in this permit:
 - i. fugitive PE shall not exceed 35.6 TPY, based on a rolling, 12-month summation; and
 - ii. the maximum annual operating hours for this emissions unit shall not exceed 3,276 hours, based upon a rolling, 12-month summation of the operating hours.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Cleveland DAQ.

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this

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

(4) The permittee shall identify the following information in the annual PER in accordance with term d)(2) above:

a. all days during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and

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

f) Testing Requirements

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

a. Emission Limitation:

Fugitive PE shall not exceed 520.8 lbs/day.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in U.S. EPA reference document AP042, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 12.10, Table 12.10-7 (1/95) for PE for the shakeout operation (3.2 lbs/ton of product produced) by the max process weight rate for the shakeout operation.

b. Emission Limitation:

Fugitive PE shall not exceed 35.6 TPY, based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined by multiplying the calculated emission rate for PE from section f)(1)a. above by the actual annual hours of operation from section d)(1)a. and the factor (1 ton/2,000 lbs).

c. Emission Limitation:

Visible emissions of fugitive dust from this emissions unit shall not exceed 10% opacity, as a 3-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

g) Miscellaneous Requirements

(1) This emissions unit was installed in December 1984.

6. Emissions Unit Group - Gaylords: P002 and P003

EU ID	Operations, Property and/or Equipment Description
P002	Gaylord SATB-30 located in the Static Foundry.
P003	Gaylord Model SATB-30, enclosed semi-automatic core forming machine located in the Static Foundry.

- 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. See d)(6), d)(7), d)(8), and e)(4).
- (2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
- a. See b)(1)b., b)(2)b., b)(2)c., c)(1), c)(2), c)(3), d)(1), d)(2), d)(3), e)(1), f)(1)e., f)(1)f., and f)(1)g.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI #13-2959, issued 5/10/1995, PTO P0057003, issued 8/11/1995, PTIO P0107363, issued 3/2/2011, and PTIO P0111676, issued 2/21/2013.)	Particulate emissions (PE) shall not exceed 16.56 pounds per day (lbs/day) from P002 and P003 combined. Organic compound (OC) emissions shall not exceed 740 lbs/day from P002 and P003 combined. Volatile organic compound (VOC) emissions shall not exceed 80.88 lbs/day from P002 and P003 combined. Visible PE for the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average. See b)(2)a. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D) (Synthetic Minor to avoid Title V and NNSR for VOC)	PE shall not exceed 0.43 ton per year (TPY) from P002 and P003 combined, based on a rolling, 12-month summation. OC emissions shall not exceed 47.5 TPY from P002 and P003 combined, based on a rolling, 12-month summation. VOC/hazardous air pollutant (HAP) emissions shall not exceed 5.15 TPY from P002 and P003 combined, based on a rolling, 12-month summation of the VOC emissions. See b)(2)b, b)(2)c, c)(1), c)(2), and c)(3) below.
c.	OAC rule 3745-17-07(A)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to the OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to the OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The emissions from this emissions unit shall be vented to the baghouse at all times when the emissions unit is in operation.
- b. The combined emissions from P002 and P003 shall not exceed 0.43 TPY PE, based on a rolling, 12-month summation of the particulate emissions.
- c. The combined emissions from P002 and P003 shall not exceed 47.5 TPY OC and 5.15 TPY VOC/HAP emissions based on a rolling, 12-month summation of OC and VOC/HAP emissions.

c) Operational Restrictions

- (1) The maximum annual usage rate of resin for P002 and P003 combined shall not exceed 23,000 pounds, based on a rolling 12-month summation of the usage rates.
- (2) The maximum annual usage rate of hardener for P002 and P003 combined shall not exceed 100,000 pounds, based on a rolling 12-month summation of the usage rates.

- (3) The maximum annual usage rate of sand for P002 and P003 combined shall not exceed 24,000,000 pounds, based on a rolling 12-month summation of the usage rates.
 - (4) The permittee shall operate the baghouse filtration system for the control of PE whenever these emissions units are in operation and shall maintain the baghouse particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.
 - (5) In the event the baghouse particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual(s), or with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall collect and maintain monthly records of the particulate, OC, and VOC emissions and the rolling 12-month emissions of particulate, OC, and VOC/HAPs.
 - (2) The permittee shall collect and record the following information each day when operating these emissions units:
 - a. the number of sand cores produced by these emissions units;
 - b. the amount, in pounds, of sand used during each day;
 - c. the amount, in pounds, of resin used during each day;
 - d. the amount, in pounds, of hardener used during each day;
 - e. the number of hours of operation for each day;
 - f. the number of cycles performed each day;
 - g. the total PE rate from all sand used in these emissions units, in pounds per day;
 - h. the total OC emission rate from all resin and hardener used in these emissions units, in pounds per day; and
 - i. the total VOC/HAPs emission rate from all resin and hardener used in these emissions units, in pounds per day.
 - (3) The permittee shall collect and record the amount, in pounds, of sand, resin, and hardener used on a monthly basis for the purpose of determining annual usage.
 - (4) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manual(s) for the baghouse particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request.

- (5) The permittee shall conduct monthly maintenance inspections of the baghouse particulate filter by qualified personnel to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. The maintenance inspections shall include removal and inspection of the filters for cleanliness and effectiveness, and clean and/or replace the filters with new filters as necessary.
- (6) The permittee shall document each monthly inspection of the baghouse particulate filter system and maintain the following information:
 - a. the date of the inspection;
 - b. a description of each/any problem identified and the date it was corrected;
 - c. a description of any maintenance and repairs performed; and
 - d. the name of the person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Cleveland DAQ upon request.

- (7) The permittee shall maintain records that document any time periods when the baghouse particulate filter was not in service when one or both of the emissions units was in operation, as well as, a record of all operations during which the baghouse particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Cleveland DAQ upon request.
- (8) The PTIO application for these emissions units, P002 and P003, was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system(s), as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted at over one TPY using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration results from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A," as follows:
 - a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (threshold limit value (TLV) was and shall be used, if the chemical is listed):

- i. TLV from the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; or
- ii. Short term exposure limit (STEL) or the ceiling value from the ACGIH Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions units, i.e., 24 hours per day and 7 days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the MAGLC:

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more TPY) or "worst case" toxic contaminants:

Toxic Contaminant: 2-Phenoxy-Ethanol

TLV (mg/m³): 100

Maximum Hourly Emission Rate (lbs/hr): 1.14

Predicted 1-hour Maximum Ground-Level Concentration (ug/m³): 351.23

MAGLC (ug/m³): 2,381

Toxic Contaminant: Methanol

TLV (mg/m³): 262.09

Maximum Hourly Emission Rate (lbs/hr): 1.86

Predicted 1-hour Maximum Ground-Level Concentration (ug/m³): 573.07

MAGLC (ug/m³): 6,240

The permittee has demonstrated that emissions of 2-Phenoxy-Ethanol and Methanol from emissions units P002 and P003 is calculated to be less than eighty percent of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

- (9) Prior to making any physical changes to or changes in the method of operation of one or both of the emissions units that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to one or both of the emissions units or their exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a “modification” under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of one or both of the emissions units, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

- (10) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F):
 - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);
 - c. a copy of the computer model run(s) that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions units to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - d. the documentation of the initial evaluation of compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to one or both of the emissions units or the materials applied.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, recordkeeping, and/or testing requirements in this permit:
 - i. all exceedances of the rolling 12-month emission limitation for particulate emissions;
 - ii. all exceedances of the rolling 12-month emission limitation for OC;
 - iii. all exceedances of the rolling 12-month emission limitation for VOC/HAP;
 - iv. all exceedances of the rolling 12-month usage limitation of sand;
 - v. all exceedances of the rolling 12-month usage limitation of resin; and
 - vi. all exceedances of the rolling 12-month usage limitation of hardener.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Cleveland DAQ.

- (3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (4) The permittee shall identify in the annual PER the following information concerning the operations of the baghouse during the 12-month reporting period for these units:
 - a. each month that a baghouse inspection was not performed in accordance with d)(5) and the corrective actions that were taken to inspect the baghouse;

- b. any period of time (start time and date, and end time and date) when the emissions units were in operation and the process emissions were not vented to the baghouse;
 - c. each incident of deviation described in “a” (above) where a prompt investigation was not conducted; and
 - d. each incident of deviation described in “a” where proper records were not maintained for the investigation and/or corrective action(s), as identified in the monitoring and recordkeeping requirements of this permit.
- (5) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual PER. If no changes to the emissions, emissions units, or the exhaust stack have been made, then the report shall include a statement to this effect.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:
PE shall not exceed 16.56 lbs/day from P002 and P003 combined.
Applicable Compliance Method:
Compliance shall be determined by multiplying the emission factor specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 12.10, Table 12.10-7 (1/95) for PE for the sand handling operation (1.1 lbs/ton of sand handled) by the max process weight rate for the sand handled per day.
If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(9).
 - b. Emission Limitation:
OC emissions shall not exceed 740 lbs/day from P002 and P003 combined.
Applicable Compliance Method:
Compliance shall be determined based on the recordkeeping specified in d)(1) and d)(2).



c. Emission Limitation:

VOC emissions shall not exceed 80.88 lbs/day from P002 and P003 combined.

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in d)(1) and d)(2).

d. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

e. Emission Limitation:

PE shall not exceed 0.43 TPY from P002 and P003 combined, based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in d)(1) – d)(3) and the following equation:

$$E = (1.1 \text{ lbs PE/ton sand used}) \times (\text{tons sand used/month}) \times (1 \text{ ton}/2,000 \text{ lbs}) \times (1 - 0.98 \text{ CE})$$

Where:

E = Emissions of PE in tons/month

The permittee shall then sum the total monthly PE each month, for that month and the previous 11 months, as a rolling, 12-month summation.

f. Emission Limitation:

OC emissions shall not exceed 47.5 TPY from P002 and P003 combined, based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in d)(1) – d)(3) and the following equation:

$$E = (0.95 \text{ lbs OC/ton hardener used}) \times (\text{tons hardener used/month}) \times (1 \text{ ton}/2,000 \text{ lbs})$$



Where:

E = Emissions of OC in tons/month

The permittee shall then sum the total monthly OC emissions each month, for that month and the previous 11 months, as a rolling, 12-month summation.

g. Emission Limitation:

VOC/HAP emissions shall not exceed 5.15 TPY from P002 and P003 combined, based on a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined based on the recordkeeping specified in d)(1) – d)(3) and the following equation:

$$E = [[(23.0 \text{ lbs VOC/ton resin used}) \times (\text{tons resin used/month})] + [(0.05 \text{ lbs VOC/ton hardener}) \times (\text{tons hardener used/month})]] \times (1 \text{ ton}/2,000 \text{ lbs})$$

Where:

E = Emissions of VOC/HAPs in tons/month

The permittee shall then sum the total monthly VOC/HAP emissions each month, for that month and the previous 11 months, as a rolling, 12-month summation.

g) Miscellaneous Requirements

- (1) P002 was installed in July 1994.
- (2) P003 was installed in December 1999.
- (3) Emission limits and resin/hardener/sand weight throughput limits are based on the combined emissions from P002, P003, and emissions unit P015, which was shut down on July 31, 2012.