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

7/15/2014

Certified Mail

Mike Oxford
National Electrical Carbon
200 North Town Street
Fostoria, OH 44830

Facility ID: 0374010109
Permit Number: P0108354
County: Seneca

RE: DRAFT AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and the local newspaper, The Advertiser Tribune. A copy of the public notice, the Statement of Basis, 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
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

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 processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-NWDO; Michigan

PUBLIC NOTICE
7/15/2014 Issuance of Draft Air Pollution Title V Permit

National Electrical Carbon
200 North Town Street,
Fostoria, OH 44830
Seneca County

FACILITY DESC.:	Carbon and Graphite Product Manufacturing
PERMIT #:	P0108354
PERMIT TYPE:	Renewal
PERMIT DESC:	Renewal Title V operating permit for carbon and graphite products manufacturing facility.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the permit # or: Andrea Moore, Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402. Ph: (419)352-8461

Statement of Basis For Air Pollution Title V Permit

Facility ID:	0374010109
Facility Name:	National Electrical Carbon
Facility Description:	Carbon and Graphite Products.
Facility Address:	200 North Town Street, Fostoria, OH 44830
Permit #:	P0108354, Renewal

This facility is subject to Title V because it is major for:

☐ Lead ☐ Sulfur Dioxide ☐ Carbon Monoxide ☒ Volatile Organic Compounds ☐ Nitrogen Oxides
☒ Particulate Matter ≤ 10 microns ☒ Single Hazardous Air Pollutant ☒ Combined Hazardous Air Pollutants
☐ Maximum Available Control Technology Standard(s) ☐ GHG ☐ Title IV

A. Standard Terms and Conditions

Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(U)?	YES
Were there any "common control" issues associated with this facility? If yes, provide a summary of those issues and explain how the DAPC decided to resolve them.	NO
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a minor permit modification per OAC rule 3745-77-08(C)(1)	PTI 03-17256, issued 1/18/2007 (P221): Initial installation permit. PTI P0109555, issued 5/19/2012 (P223): Administrative modification to add a second thermal oxidizer; superseded initial installation PTI 03-17406, issued 2/21/2008. PTI P0110460, issued 7/23/2012 (R001): Administrative modification to allow both spray coat and roll coat operations. PTI P0110745, issued 2/12/2013 (P096): Administrative modification to remove OAC rule 3745-21-07(G)(2) as an applicable rule and redefine PTE. PTI P0115399, issued 9/26/2013 (P101): Administrative modification to the parametric monitoring of the thermal oxidizer to change a 1-hour average combustion temperature to a 3-hour average combustion temperature; superseded PTI P0110748, issued 9/19/2012 which was an administrative modification to correct the emission limitations based on more accurate emission data.

	PTI P0115397, issued 9/26/2013 (P094): Administrative modification to the parametric monitoring of the thermal oxidizer to change a 1-hour average combustion temperature to a 3-hour average combustion temperature; superseded PTI P0110746, issued 9/19/2012 which was an administrative modification to correct the emission limitations based on more accurate emission data. PTI P0115568, issued 11/4/2013 (P119): Administrative modification to combine emissions unit P119, P120, & P121 into one emissions unit. PTI P0115746, issued 2/11/2014 (P106): Administrative modification to correct SO2 emission limit; superseded PTI P0115398, issued 10/16/2013 that was an administrative modification to the parametric monitoring of the thermal oxidizer to change a 1-hour average combustion temperature to a 3-hour average combustion temperature. PTI P0116202, issued 2/11/2014 (P069): Initial installation permit. PTI P0115396, issued 2/11/2/14 (P220): Administrative modification to the parametric monitoring of the baghouse to switch from pressure drop monitoring to visible emission monitoring; superseded initial installation PTI 03-17151, issued 8/22/2006. PTI P0115185, issued 2/11/2014 (P008, P011, P012, P013, P016, P035, P037, P051, P067, P073, P076, P079, P105, P124, P126, P127, P128, P129, P130, P207-P212, P215, P217, P219, P229, & P231): Initial installation permits requesting federally enforceable emission limitations/restrictions.
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a significant permit modification per OAC rule 3745-77-08(C)(3)	N/A
Please identify the affected unit(s)and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a reopening per OAC rule 3745-77-08(D)	N/A
Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a renewal per OAC rule 3745-77-08(E)	N/A
Please identify the affected unit(s) and pollutant(s) for which a Compliance Assurance Monitoring (CAM) Plan is required per 40 CFR 64. Provide more emissions unit specific detail	P012, P013, P051, & P223: Thermal oxidizer control devices for VOC. P008, P011, P035, P037, P076, P105, P126, P127, P129, P130, P215, P217, P219, & P220: Baghouse control devices for PE/PM_{10}. Bag leak detection systems were not considered for CAM. The facility developed the CAM monitoring approach based on consideration for the history, site-specific factors, and

in Section C.	existing equipment at the facility.

B. Facility-Wide Terms and Conditions

Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	
B.2.		40 CFR Part 64	List of emissions units for which CAM plans have been submitted and approved by Ohio EPA.
B.3.	-17, -18, -21, and/or -31	40 CFR Part 60 and/or 63	List of insignificant emissions units that are subject to one or more applicable requirements.

C. Emissions Unit Terms and Conditions

Key:
EU = emissions unit ID
ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit)
OR = operational restriction
M = monitoring requirements
ENF = did noncompliance issues drive the monitoring requirements?
R = record keeping requirements
Rp = reporting requirements
ET = emission testing requirements (not including compliance method terms)
St = streamlining term used to replace a PTI monitoring, record keeping, or reporting requirement with an equivalent or more stringent requirement
Misc = miscellaneous requirements

U(s)	Limitation	Basis		ND	OR	M	ENF	R	Rp	ET	St	Misc	Comments
		SIP (3745-)	Other										
P008 P126 P217	0.01 gr PM_{10}/dscf	31-05(A)(3)		N	N	Y	N	Y	Y	Y	N	N	
P011 P067 P079 P124	0.01 gr PM_{10}/dscf	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit and control device.
P035 P037	0.01 gr PM_{10}/dscf	31-05(F)		N	Y	Y	N	Y	Y	Y	N	N	OR- Baghouse control required capable of achieving 0.01 gr PM_{10}/dscf.

P076 P105 P127 P129 P130 P215 P219 P220													M/R/Rp requirements (VE checks) were established to verify compliance with the OR.
P016 P067 P073 P128 P229	0.01 gr PM_{10}/dscf	31-05(F)		N	Y	Y	N	Y	Y	N	N	N	OR- Baghouse control required capable of achieving 0.01 gr PM_{10}/dscf. M/R/Rp requirements (VE checks) were established to verify compliance with the OR. ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit and control device.
P012 P013	Combined: 3.04 lbs VOC/hr 0.05 lb CO/hr 0.20 lb PE/hr 2.90 lbs SO2/hr 5.86 lbs NOx/hr	P012: 31-05 (F) P013: 31-05(A)(3)		N N	Y N	Y Y	N N	Y Y	Y Y	Y Y	N N	N N	OR- (P012) Thermal oxidizer required during operation of the emissions unit. (BAT requires the use of a thermal oxidizer for P013.) M/R/Rp requirements established to ensure proper operation of the control device. ET- emission testing will be required to verify compliance with VOC, SO2, and NOx emission rates.
P018	1.74 lbs PE/mmBtu	17-10(C)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to ensure proper operation of the thermal incinerator control device. ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit and control device.
P018	0.78 lb PE/hr	17-11(B)(1)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to ensure proper operation of the control device. ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit and control

													device.
P051	4.60 lbs VOC/hr 6.00 lbs SO2/hr	31-05(A)(3)		N	N	Y	N	Y	Y	Y	N	N	M/R/Rp requirements established to ensure proper operation of the thermal oxidizer control device. ET- emission testing will be required to verify compliance with VOC & SO2 emission rates.
P051	1.44 lbs PE/hr	17-11(B)(1)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to ensure proper operation of the thermal oxidizer control device.
P094	1.57 lbs SO2/hr 0.61 lbs NOx/hr 0.09 lbs VOC/hr	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to ensure proper operation of the thermal incinerator control device. ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emission limit and control device.
P096	12.1 lbs VOC/gallon	31-05(A)(3)		N	Y	Y	N	Y	Y	N	N	N	OR- Required use of a refrigerated chiller and established work practice standards. ET- Usage records are sufficient to demonstrate compliance with the emission limitation.
P101	1.57 lbs SO2/hr 0.79 lb NOx/hr 0.09 lb VOC/hr	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to ensure proper operation of the thermal oxidizer control device. ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit and control device.
P106	0.10 lb PE/hr 1.57 lbs CO/hr 2.00 lbs SO2/hr	31-05(A)(3)		N	N	Y	N	Y	Y	Y	N	N	M/R/Rp requirements established to ensure proper operation of the thermal oxidizer control device. ET- emission testing will be required to verify compliance with SO2 emission rate.
P119	1.22 lbs PE/hr	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements (VE checks) to indicate compliance with PE. ET- M/R/Rp requirements are sufficient to demonstrate

	3.51 lbs CO/hr 0.06 lb VOC/hr												compliance/proper operation of the emissions unit.
P221	0.02 lb PM10/hr 0.12 lb Cl/hr	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to ensure proper operation of the scrubber control device. ET- M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit and control device.
P223	4.00 lbs VOC/hr from drying ovens 0.57 lb VOC/hr from char and high-fire ovens	31-05(A)(3)		N	N	Y	N	Y	Y	Y	N	N	M/R/Rp requirements established to ensure proper operation of the thermal oxidizer control devices. ET- emission testing will be required to verify compliance with VOC emission rate from the thermal oxidizers.
P207 P208 P209 P210 P211 P212	1.01 lbs PM10/hr 1.53 lbs VOC/hr	31-05(A)(3)		N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements are sufficient to demonstrate compliance/proper operation of the emissions unit. ET- Emission testing in 2013 was used for the basis of the emission limits.
P231	2.03 lbs VOC/hr	31-05(A)(3)		N	N	N	N	N	N	N	N	N	The emission limit represents the PTE; therefore, no M/R/Rp/ET requirements are necessary to demonstrate compliance.
R001	55.23 tons VOC/rolling, 12-mos 9.90 tons any HAP/rolling, 12-mos 24.90 tons combined HAPs/rolling, 12-mos	31-05(D)		N	Y	Y	N	Y	Y	N	Y	Y	OR- Use of dry particulate filters; use of calculation method to limit VOC and HAP(s). M/R/Rp requirements are sufficient to demonstrate compliance with the OR. ET- M/R/Rp requirements are sufficient to demonstrate compliance with the emission limitations.

P008 P011 P012 P013 P016 P018 P035 P037 P067 P069 P073 P076 P079 P105 P105 P119 P124 P126 P127 P128 P129 P130 P207 P208 P209 P210 P211 P212 P215 P217 P219 P220 P221 P229	NA	17-11(B)		Y	N	N	N	N	N	N	N	N	BAT requirements are more stringent.
P094 P101	Exempt	17-11(B) 17-07(A)		Y	N	N	N	N	N	N	N	N	The UMRE is less than 10 lbs PE/hr and the PWR=0 because the burning of natural gas is the only source of PE.
R001	Control Requirements	17-11(C)		N	Y	Y	N	Y	Y	N	N	N	OR- Requirements for the use and maintenance of dry particulate filtration. M/R/Rp requirements are sufficient to maintain compliance. ET- NA

P008 P011 P012 P013 P016 P018 P051 P067 P069 P073 P076 P079 P105 P106 P119 P124 P126 P127 P128 P129 P130 P207 P208 P209 P210 P211 P212 P215 P217 P219	20% opacity as a 6-min average, except as provided by rule.	17-07(A)		N	N	Y	N	Y	Y	N	N	N	ET- M/R/Rp requirements are sufficient to demonstrate compliance without a formal Method 9.
P035 P037 P220 P221 P229	0% opacity as a 6-min average	31-05		N	N	Y	N	Y	Y	N	N	N	ET- M/R/Rp requirements are sufficient to demonstrate compliance without a formal Method 9.
P012 P013 P018 P051 P106		18-06(E)		Y	N	N	N	N	N	N	N	N	Exempt pursuant to OAC rule 3745-18-06(C).
P094		18-06(G)		Y	N	N	N	N	N	N	N	N	Exempt pursuant to OAC rule 3745-18-06(B).

P101													
P207 P208 P209 P210 P211 P212 P231	NA	21-17(M)		Y	N	N	N	N	N	N	N	N	Not subject to the rule because the emissions units do not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
P096 R001	None	-114	ORC 3704.03 (F)	N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to verify compliance with the Toxic Air Contaminant Statute. ET- M/R/Rp requirements are sufficient to demonstrate compliance.
P223	19.92 lbs formal-dehyde/day	-114	ORC 3704.03 (F)	N	N	Y	N	Y	Y	N	N	N	M/R/Rp requirements established to verify compliance with the Toxic Air Contaminant Statute. ET- M/R/Rp requirements are sufficient to demonstrate compliance
P016 P018 P067 P069 P073 P079 P094 P096 P101 P106 P119 P124 P128 P207 P208 P209 P210 P211 P212 P218 P221 P229	NA		40 CFR Part 64	Y	N	N	N	N	N	N	N	N	The emissions units are not subject to the requirements of CAM because their uncontrolled PTEs are less than 100 TPY.

P231 R001													

DRAFT

Division of Air Pollution Control
Title V Permit
for
National Electrical Carbon

Facility ID:	0374010109
Permit Number:	P0108354
Permit Type:	Renewal
Issued:	7/15/2014
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
National Electrical Carbon

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance 6
4. Risk Management Plans 7
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 9
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 11
17. Off-Permit Changes 12
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 13
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements 15

28. Permit Transfers 15
29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15
30. Submitting Documents Required by this Permit 15
B. Facility-Wide Terms and Conditions 17
C. Emissions Unit Terms and Conditions 19
1. P008, Coke Screening System 20
2. P011, DB40 System 27
3. P012, #2 National Furnaces 35
4. P013, #1 National Furnaces 47
5. P016, Pack Condition System 59
6. P018, Brush Ovens 63
7. P035, PC Building sawing, and grinding 70
8. P037, #2 Black Line 77
9. P051, Rotary Calciner 84
10. P067, Bldg. 19 Mixing 94
11. P069, Cloth/Felt Inspection Table 98
12. P073, Cement Mixing 102
13. P076, Brush Dumping 106
14. P079, Brush Grinding 113
15. P094, Car Bottom Kiln #1 117
16. P096, Rayon Cloth Scouring Unit 123
17. P101, Car Bottom Kiln #2 130
18. P105, Graphite Coke Screening System 136
19. P106, Vertical Calciner 143
20. P119, Furnace G-1 151
21. P124, CNC Lathe 1 156
22. P126, North Raymond Mill 160
23. P127, South Raymond Mill 167
24. P128, JB Mill 174
25. P129, East Double Ram Press/Flour Bin 178
26. P130, West Double Ram/Press Flour Bin 185
27. P215, Chemical Room 192
28. P217, Pipe and Tube Process 199
29. P218, Farrel Mixer-Fume 206
30. P219, MicroMill System 208

31. P220, CREE machining line 215
32. P221, Chlorine Furnace 223
33. P223, Rigid Board Processing Line 230
34. P229, Rigid Board Sawing 243
35. P231, #5 Jumbo Extruder, Plug Operation, Jumbo Hopper, Preheater 248
36. P237, 8 Inch Auger Extruder 251
37. R001, Rigid Board Foiling 254
38. Emissions Unit Group - Bread Mixers (Building #42): P207, P208, P209, P210, P211, P212 [The company operates (6) bread mixers. A maximum of (4) bread mixers can operate simultaneously.]. 263

Authorization

Facility ID:	0374010109
Facility Description:	Carbon and Graphite Products.
Application Number(s):	A0018738, A0018739, A0018740, A0037377, A0041604, A0048457, A0050840
Permit Number:	P0108354
Permit Description:	Renewal Title V operating permit for carbon and graphite products manufacturing facility.
Permit Type:	Renewal
Issue Date:	7/15/2014
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	P0087698

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

National Electrical Carbon
200 North Town Street
Fostoria, OH 44830

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

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

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Northwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(5) Standard Term and Condition A. 30.

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordingsfor continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submittedscheduled maintenancerequests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the

probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA DAPC, Northwest District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA DAPC, Northwest District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally

enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA DAPC, Northwest District Office unless otherwise specified.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Reporting of Any Exceedence of a Federally Enforceable Emission Limitation or Control Requirement Resulting From Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

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

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permitexcept as provided pursuant to A.16 below.

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible

Officialthat, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA DAPC, Northwest District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittentconsistent with A.13.d.2.a above.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d.2.a above.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northwest District Office with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Ohio EPA DAPC, Northwest District Office as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

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

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, noemissions unit identified in this permit that has beencertified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11)))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to theOhio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio

EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

27. Scheduled Maintenance/Malfunction Reporting For State-Only Requirements

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or

c) where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed

basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event ofan alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA DAPC, Northwest District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. Pursuant to 40 CFR, Part 64, the permittee has submitted, and the Ohio EPA has approved a compliance assurance monitoring plan for emissions units P008, P011, P012, P013, P035, P037, P051, P076, P105, P126, P127, P129, P130, P215, P217, P219, P220 and P223 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [Authority for term: 40 CFR, Part 64]

3. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit-to-install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21,and 3745-31, and/or 40 CFR Part 60 or 63:

P068	Acetone Mixer 19A (PTI #P0115185)
P083	Building #44 Bake Furnaces (PTI #P0115185)
P089	Slot Furnace
P097	North 20-Gallon Acetone Mixer (PTI #P0115185)
P098	South 20-Gallon Acetone Mixer (PTI #P0115185)
P125	Continuous Electric Fabric Bake Furnace #1 (PTI #P0108800)
P162	Fine Grain Furnace #1 (PTI #03-13645)
P163	Fine Grain Furnace #2 (PTI #03-13645)
P164	Fine Grain Furnace #3 (PTI #03-13645)
P201	Cylinder Mixer #16 (PTI #P0115185)
P202	Cylinder Mixer #18 (PTI #P0115185)
P222	Continuous Electric Fabric Bake Furnace #2 (PTI #P0108800)
P224	Continuous Electric Fabric Bake Furnace #4 (PTI #P0108800)
P225	Caterpillar Electrical Generator D175-2 (PBR06873)
P226	Caterpillar Electrical Generator D200P3 (PBR06873)
P227	Continuous Electric Fabric Bake Furnace #3 (PTI #P0108422)
P230	#4 Jumbo Extruder (PTI #P0115185)

   [Authority for term: OAC rule 3745-77-07(A)(13)]

C. Emissions Unit Terms and Conditions

1. P008, Coke Screening System

Operations, Property and/or Equipment Description:

coke screening system with baghouse DC17-27

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

(1) 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 #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 6.00 tons PM_{10}/year See b)(2)a.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any

corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

6.00 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	16000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible PE limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2016 . The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

2. P011, DB40 System

Operations, Property and/or Equipment Description:

DB-40 System (material transfer, material handling, and milling) with baghouse DC42-52. [Baghouse DC42-52 serves emissions units P011, P126, P127, P129, P130, and P219.]

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

(1) 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 #P0115185, issued February 11, 2014]	See b)(2)a. and b)(2)b. 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 1.20 pounds volatile organic compounds (VOC)/hour & 5.26 tons VOC/year
		<u>Combined Emission Limit for P011, P126, P127, P129, P130, and P219</u>: 12.00 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC42-52 is shared with emissions unitsP011, P126, P127, P129, P130, and P219. The annual emission rate established in this permit is inclusive of all emissions units vented to DC42-52.

b. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

12.00 tons PM_{10}/year, combined for emissions units P011, P126, P127, P129, P130, and P219

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	32000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P011, P126, P127, P129, P130, and P219.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

1.20 pounds VOC/hour

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.The hourly PTE may be calculated, as follows:

667 lbs (1)	$1.8x10^{-3}$ lb VOC (2)
hour	lb material

Where:

(1) Maximum hourly process weight rate, as specified in the permit application.

(2) VOC emission factor, as supplied by the company in the permit application, basedon emission testing conducted on 10/24/2013 on similar emissions units.

If required, compliance with the VOC emission limitation above shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25, or 25A.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

d. Emission Limitation

5.26 tons VOC/hour

Applicable Compliance Method

The annual emission limitation was established based on the maximum annual hours of operation and can be calculated, as follows:

1.20 lbsVOC(1)	8760 hrs (2)	1 ton (3)
hr	year	2000 lbs

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P011, P126, P127, P129, P130, and P219. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval

prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

3. P012, #2 National Furnaces

Operations, Property and/or Equipment Description:

#2 National Furnaces: (12) natural gas-fired, carbon furnaces with thermal oxidizer TO17-01.[TO17-01 serves emissions units P012 and P013.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	<u>Combined Emission Limits for P012 and P013</u>: 3.04 pounds volatile organic compounds (VOC)/hour & 13.32 tons VOC/year 0.05 pound carbon monoxide (CO)/hour & 0.22 ton CO/year 0.20 pound particulate emissions (PE)/hour & 0.88 ton PE/year 2.90 pounds sulfur dioxide (SO_2)/hour & 12.70 tons SO_2/year 5.86 pounds nitrogen oxides (NOx)/hour & 25.67 tons NOx/year See b)(2)a. through b)(2)c. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-18-06(E)	This emissions unit is exempt from the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C)
e.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(6); e)(1); and g)(1).

(2) Additional Terms and Conditions

a. Thermal oxidizer TO17-01 is shared with emissions unit P013, National Furnaces #1. The emissions rates established in this permit are inclusive of both emissions units vented to T017-01.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 3.04 pounds VOC/hour and 13.32 tons VOC/year;

ii. 0.05 pound CO/hour and 0.22 ton CO/year; and

iii. 0.20 pound PE/hour and 0.88 ton PE/year.

All particulate emissions are assumed to be particulate matter ≤ 10 microns in size (PM_{10}).

c. This permit establishes the following voluntary restrictions established under OAC rule 3745-31-05(F):

i. 2.90 pounds SO_2/hour and 12.70 tons SO_2/year; and

ii. 5.86 pounds NOx/hour and 25.67 tons NOx/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements which limit PTE [See b)(2)b.]:

a. The #2 National Furnaces shall be vented to a thermal incinerator capable of achieving the following destruction efficiencies:

i. 95% control efficiency for the destruction of VOC; and

ii. 99% control efficiency for the destruction of CO.

b. The #2 National Furnaces shall be capable of achieving a maximum outlet emission rate of 0.20 pound PE/hour based on the continuous use of the thermal incinerator. The emission limitation was established based on the results of

stack testing conducted on this emissions unit in 2006 and included the operation of the thermal incinerator. The actual PE destruction efficiency of the thermal incinerator is unknown.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizer controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and 40 CFR Part 64.3(b)]

(2) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the permitting authority, and if necessary, submit a proposed modification to the Part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indictor ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

a. The permittee shall collect and record the temperature at least once every hour during each day of operation.

b. Whenever the temperature deviates from the established value, the permittee shall restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The permittee shall promptly investigate the cause of the deviation and shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

c. 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 to within the established value unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the combustion temperature immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

d. <u>Minimum Combustion Temperature</u>

The combustion temperature within the thermal incinerator shall be maintained at or above 1,200 (≥1,200) degrees Fahrenheit, as a three-hour average, at all times when the associated emissions unit is in operation.

e. The specified value is effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio

EPA District Office or local air agency. The permittee may request revisions to the range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emissions rate(s) for this emissions unit. In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall conduct annual inspections of the control device and monitoring equipment as indicated below. At a minimum, the following shall be conducted:

a. check vacuum out the electrical panel;

b. check all electrical connections;

c. check all safety switches for proper operation;

d. check lubricant valve;

e. check lubricant fan coupling;

f. check motor bearings;

g. perform refractory inspection;

h. perform burner calibration;

i. perform temperature control calibration; and

j. perform duct work cleaning.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee shall maintain a supply of any replacement parts necessary to ensure that the thermal oxidizer will operate properly.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1);40 CFR Part 64; and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

3.04 pounds VOC/hour, combined for P012 and P013

<u>Applicable Compliance Method</u>

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

1-0.95 (1)	uncontrolled lbs VOC (2)
	hour

Where:

(1) 95% control efficiency for the destruction of VOC from the thermal incinerator, as indicated in the permit application.

(2) Total uncontrolled VOC emissions generated during the process and from natural gas combustion.

570.8 lbs [(a)]	0.106 [(b)]	+	59.8 mmBtu [(c)]	5.5 lbs VOC [(d)]	mmcf [(e)]
hr			hr	mmcf	1020 mmBtu

Where:

(a) Combined, maximum process weight rate from P012 and P013, as indicated in the permit application.

(b) Maximum VOC loss rate of 10.6% based on weight loss of tar pitch, as indicated in the permit application.

(c) Combined, maximum burner capacity from P012 and P013.

(d) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(e) Conversion rate.

If required, compliance with the VOC emission limitation above shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and 18, 25, or 25A.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

0.05 pound CO/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

59.8 mmBtu [(1)]	84 lb CO [(2)]	mmcf [(3)]	1-0.99 [(4)]
hr	mmcf	1020 mmBtu	

Where:

(1) Combined, maximum burner capacity from P012 and P013.

(2) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(3) Conversion rate.

(4) 99% control efficiency for the destruction of CO from the thermal incinerator, as indicated in the permit application.

If required, compliance with the VOC emission limitation above shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and 10.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

0.20 pound PE/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation.

This emission limitation was established based on the results of emission testing conducted on the control device associated with emissions units P012 and P013 on May 23, 2006. If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 5 and 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

d. Emission Limitation

2.90 pounds SO_2/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

$$\frac{1.14 \text{ lbs } SO_2^{(1)}}{hr} + \frac{1.72 \text{ lbs } SO_2^{(2)}}{hr} + \frac{0.04 \text{ lb } SO_2^{(3)}}{hr}$$

Where:

(1) SO_2 emissions from elemental sulfur loss:

$$\frac{570.8 \text{ lbs}^{(a)}}{hr} \quad 0.001^{(b)} \quad \frac{2 \text{ mol wt. } SO_2^{(c)}}{\text{mol. wt. S}}$$

Where:

(a) Combined, maximum process weight rate from P012 and P013, as indicated in the permit application.

(b) Maximum sulfur loss rate of 0.1%, as indicated in the permit application.

(c) A factor of 2, based on the molecular weight of sulfur dioxide/molecular weight of sulfur.

(2) SO_2 emissions of sulfur loss from tar pitch:

$$\frac{570.8 \text{ lbs}^{(a)}}{hr} \quad 0.3^{(b)} \quad 0.005^{(c)} \quad \frac{2 \text{ mol wt. } SO_2^{(d)}}{\text{mol. wt. S}}$$

Where:

(a) Combined, maximum process weight rate from P012 and P013, as indicated in the permit application.

(b) Maximum coal tar pitch concentration of 30%, as indicated in the permit application.

(c) Maximum sulfur loss rate of 0.5%, as indicated in the permit application.

(d) A factor of 2, based on the molecular weight of sulfur dioxide/molecular weight of sulfur.

(3) SO_2 emissions from natural gas combustion:

$$\frac{59.8 \text{ mmBtu}^{(a)}}{hr} \quad \frac{0.6 \text{ lb } SO_2^{(b)}}{\text{mmcf}} \quad \frac{\text{mmcf}^{(c)}}{1020 \text{ mmBtu}}$$

Where:

(a) Combined, maximum burner capacity from P012 and P013.

(b) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(c) Conversion rate.

If required, compliance with the SO_2emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 6.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e. Emission Limitation

5.86 pounds NOx/hour, combined for P012 and P013

Applicable Compliance Method

The hourly NOx emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

59.8 mmBtu [(a)]	100 lbs NOx [(b)]	mmcf[(c)]
hr	mmcf	1020 mmBtu

Where:

(a) Combined, maximum burner capacity from P012 and P013.

(b) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(c) Conversion rate.

If required, compliance with the hourly NOx emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 7.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f. Emission Limitations

13.32 tons VOC/year
0.22 ton CO/year
0.88 ton PE/year
12.70 tons SO_2/year
25.67 tons NOx/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and may be calculated, as follows:

lb pollutant (1)	8760 hrs (2)	1 ton (3)
hr	year	2000 lbs

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

g. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible PE limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conductedwithin six (6) months prior to the permit expiration. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 60, Appendix A, Method 18, 25, or 25(A).

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*This emissions unit shares a control device with P013. Therefore, it may be necessary to have both emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

4. P013, #1 National Furnaces

Operations, Property and/or Equipment Description:

#1 National Furnaces: (10) natural gas-fired, carbon furnaces with thermal oxidizer (TO17-01: thermal oxidizer also serves P012)

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

(1) 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 #P0115185, issued February 11, 2014]	<u>Combined Emission Limits for P012 and P013</u>: 3.04 pounds volatile organic compounds (VOC)/hour & 13.32 tons VOC/year 0.20 pound particulate emissions (PE)/hour & 0.88 ton PE/year 2.90 pounds sulfur dioxide (SO_2)/hour & 12.70 tons SO_2/year 5.86 pounds nitrogen oxides (NOx)/hour & 25.67 tons NOx/year 0.05 pound carbon monoxide (CO)/hour & 0.22 ton CO/year See b)(2)a. through b)(2)c.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the egress point associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-18-06(E)	This emissions unit is exempt from the

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).
e.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(6); e)(1); and g)(1).

(2) Additional Terms and Conditions

a. Thermal oxidizer TO17-01 is shared with emissions unit P013, National Furnaces #1. The emissions rates established in this permit are inclusive of both emissions units vented to T017-01.

b. All particulate emissions are assumed to be particulate matter ≤ 10 microns in size (PM_{10}).

c. Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of a thermal oxidizer for the control of VOC and PE. BAT requirements also include compliance with the requirements of OAC rule 3745-17-07(A).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizer controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and 40 CFR Part 64.3(b)]

(2) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

a. The permittee shall collect and record the temperature at least once every hour during each day of operation.

b. Whenever the temperature deviates from the established value, the permittee shall restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The permittee shall promptly investigate the cause of the deviation and shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

c. 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 to within the established value unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the combustion temperature immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

d. Minimum Combustion Temperature

The combustion temperature within the thermal incinerator shall be maintained at or above 1,200 (≥1,200) degrees Fahrenheit, as a three-hour average, at all times when the associated emissions unit is in operation.

e. The specified value is effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emissions rate(s) for this emissions unit. In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall conduct annual inspections of the control device and monitoring equipment as indicated below. At a minimum, the following shall be conducted:

a. check vacuum out the electrical panel;

b. check all electrical connections;

c. check all safety switches for proper operation;

d. check lubricant valve;

e. check lubricant fan coupling;

f. check motor bearings;

g. perform refractory inspection;

h. perform burner calibration;

i. perform temperature control calibration; and

j. perform duct work cleaning.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee shall maintain a supply of any replacement parts necessary to ensure that the thermal oxidizer will operate properly.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1);40 CFR Part 64; and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

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

3.04 pounds VOC/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

$$\frac{1-0.95^{(1)}}{} \quad \frac{\text{uncontrolled lbs VOC}^{(2)}}{\text{hour}}$$

Where:

(1) 95% control efficiency for the destruction of VOC from the thermal incinerator, as indicated in the permit application.

(2) Total uncontrolled VOC emissions generated during the process and from natural gas combustion.

$$\frac{570.8 \text{ lbs}^{(a)}}{\text{hr}} \quad \frac{0.106^{(b)}}{} \quad + \quad \frac{59.8 \text{ mmBtu}^{(c)}}{\text{hr}} \quad \frac{5.5 \text{ lbs VOC}^{(d)}}{\text{mmcf}} \quad \frac{\text{mmcf}^{(e)}}{1020 \text{ mmBtu}}$$

Where:

(a) Combined, maximum process weight rate from P012 and P013, as indicated in the permit application.

(b) Maximum VOC loss rate of 10.6% based on weight loss of tar pitch, as indicated in the permit application.

(c) Combined, maximum burner capacity from P012 and P013.

(d) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(e) Conversion rate.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and 18, 25, or 25A.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

0.05 pound CO/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

59.8 mmBtu (1)	84 lb CO (2)	mmcf (3)	1-0.99 (4)
hr	mmcf	1020 mmBtu	

Where:

(1) Combined, maximum burner capacity from P012 and P013.

(2) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(3) Conversion rate.

(4) 99% control efficiency for the destruction of CO from the thermal incinerator, as indicated in the permit application.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and 10.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

0.20 pound PE/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation.

This emission limitation was established based on the results of emission testing conducted on the control device associated with emissions units P012 and P013 on May 23, 2006. If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 5 and 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

d. Emission Limitation

2.90 pounds SO_2/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

$$\frac{1.14 \text{ lbs } SO_2^{(1)}}{\text{hr}} + \frac{1.72 \text{ lbs } SO_2^{(2)}}{\text{hr}} + \frac{0.04 \text{ lb } SO_2^{(3)}}{\text{hr}}$$

Where:

(1) SO_2 emissions from elemental sulfur loss:

$$\frac{570.8 \text{ lbs}^{(a)}}{\text{hr}} \quad 0.001^{(b)} \quad \frac{2 \text{ mol wt. } SO_2^{(c)}}{\text{mol. Wt. S}}$$

Where:

(a) Combined, maximum process weight rate of P012 and P013, as indicated in the permit application.

(b) Maximum sulfur loss rate of 0.1%, as indicated in the permit application.

(c) A factor of 2, based on the molecular weight of sulfur dioxide/molecular weight of sulfur.

(2) SO_2 emissions of sulfur loss from tar pitch:

$$\frac{570.8 \text{ lbs}^{(a)}}{\text{hr}} \quad 0.3^{(b)} \quad 0.005^{(c)} \quad \frac{2 \text{ mol wt. } SO_2^{(d)}}{\text{mol. Wt. S}}$$

Where:

(a) Combined, maximum process weight rate of P012 and P013, as indicated in the permit application.

(b) Maximum coal tar pitch concentration of 30%, as indicated in the permit application.

(c) Maximum sulfur loss rate of 0.5%, as indicated in the permit application.

(d) A factor of 2, based on the molecular weight of sulfur dioxide/molecular weight of sulfur.

(3) SO_2 emissions from natural gas combustion:

59.8 mmBtu [(a)]	0.6 lb SO_2[(b)]	mmcf[(c)]
hr	mmcf	1020 mmBtu

Where:

(a) Combined, maximum burner capacity from P012 and P013.

(b) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(c) Conversion rate.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 6.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e. Emission Limitation

5.86 pounds NOx/hour, combined for P012 and P013

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

59.8 mmBtu [(1)]	100 lbs NOx [(2)]	mmcf[(3)]
hr	mmcf	1020 mmBtu

Where:

(1) Combined, maximum burner capacity from P012 and P013.

(2) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(3) Conversion rate.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 7.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f. Emission Limitations

13.32 tons VOC/year

0.22 ton CO/year
0.88 ton PE/year
12.70 tons SO_2/year
25.67 tons NOx/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

lb pollutant (1)	8760 hrs (2)	1 ton (3)
hr	year	2000 lbs

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

g. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A).

If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conductedwithin six (6) months prior to the permit expiration. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 60, Appendix A, Method 18, 25, or 25(A).

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*This emissions unit shares a control device with P013. Therefore, it may be necessary to have both emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

5. P016, Pack Condition System

Operations, Property and/or Equipment Description:

coke pack conditioning systems for coke sizing and pneumatic handling [(2) blenders, storage bin, and elevators) with baghouse DC28-33

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 2.15 tons PM_{10}/year See b)(2)a. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 2.15 tons PM_{10}/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

2.15 tons PM_{10}/year

<u>Applicable Compliance Method</u>

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	5750 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A).

If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

6. P018, Brush Ovens

Operations, Property and/or Equipment Description:

(3) natural gas, direct-fired, Kirk and Blum (K&B) heat treating ovens – carbon brush stock – with thermal incinerator (FS-28)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-10(C)	1.74 pounds particulate emissions (PE)/mmBtu
b.	OAC rule 3745-17-11(B)(1)	0.78 pound PE/hour
c.	OAC rule 3745-17-07(A)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-18-06(E)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and

maintained in accordance with the manufacturers' recommendations, with any modifications deemed necessary by the permittee.

a. The permittee shall collect and record the temperature at least once every hour during each day of operation.

b. Whenever the temperature deviates from the established value, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

   i. the date and time the deviation began and the magnitude of the deviation at that time;

   ii. the date(s) the investigation was conducted;

   iii. the name(s) of the personnel who conducted the investigation; and

   iv. the findings and recommendations.

c. 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 to within the established value unless the permittee determines that corrective action is not necessary.

   i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

      (a) the reason corrective action was not necessary; and

      (b) the date and time the deviation ended.

   ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

      (a) a description of the corrective action;

      (b) the date it was completed;

      (c) the date and time the deviation ended;

      (d) the total period of time (in minutes) during which there was a deviation;

      (e) the combustion temperature immediately after the corrective action; and

      (f) the name(s) of the personnel who performed the work.

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

d. Minimum Combustion Temperature

The combustion temperature within the thermal incinerator shall be maintained at or above 1,085 (≥1,085) degrees Fahrenheit (585 degrees Celsius), as a three-hour average, at all times when the associated emissions unit is in operation.

e. The specified value is effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for this emissions unit. In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

b. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)]

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

1.74 pound PE/mmBtu

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-10(C) based on a maximum heat input rate of 13.1 mmBtu/hour, as provided in the permit application.

The actual emissions from the combustion of natural gas may be calculated, as follows:

7.6 lbs PE [(1)]	13.1 mmBtu [(2)]	1 mmcf [(3)]
mmcf	hour	1020 mmBtu

Where:

[(1)] AP-42 Chapter 1.4 (July 1998) emission factor for total particulate matter.

[(2)] Maximum, combined burner capacity of the emissions unit, as provided in the permit application.

[(3)] Conversion rate.

If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(9).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-10(C)(1)]

b. Emission Limitation

0.78 pound PE/hour

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-11(B) based on a maximum process weight rate of 168 pounds/hour, as provided in the permit application.

The actual particulate emission rate may be calculated, as follows:

168 pounds (1)	53 pounds PE (2)	1 ton (3)	1-0.85 (4)
hour	ton	2000 lbs	

Where:

(1) Maximum process weight rate of the emissions unit, as provided in the permit application.

(2) Company-supplied emission factor based on material balance calculations and assuming that all material loss is PE.

(3) Conversion rate.

(4) 85% control efficiency for the reduction of PE from the thermal incinerator, as provided in the permit application.

If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

c. Emission Limitation

Visible PE from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) Pursuant to OAC rule 3745-31-01, this emissions unit is not a “new source” and as such, is only subject to the requirements of the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21. For the purposes of federal enforceability, this emissions unit has the potential to emit the following pollutants that do not have any SIP requirements:

a. Natural Gas Combustion

5.61 tons nitrogen oxides (NOx)/year
4.73 tons carbon monoxide (CO)/year
sulfur dioxide (SO_2) emissions are negligible

lb pollutant (1)	13.1 mmBtu (2)	1 mmcf (3)	8760 hrs (4)	1 ton (3)
mmcf	hr	1020 mmBtu	yr	2000 lbs

Where:

(1) AP-42 Chapter 1.4 (July 1998) emission factors:

NOx: 100 lbs/mmcf
CO: 84 lbs/mmcf
SO_2: 0.60 lb/mmcf

(2) Maximum, combined burner capacity of the emissions unit, as provided in the permit application.

(3) Conversion rate.

(4) Maximum annual operating schedule, as provided in the permit application.

b. 7.67 tons volatile organic compounds (VOC)/year (uncontrolled*)

1.68 lbs (1)	+	0.071 lb (2)	*	8760 hrs (3)	1 ton (4)
hr		hr		yr	2000 lbs

Where:

(1) <u>VOC process emissions</u>:

168 lbs (a)	0.01 VOC (b)
hr	

Where:

(a) Maximum process weight rate of the emissions unit, as supplied in the permit application.

(b) Maximum 1% loss of VOC during the process.

(2) <u>VOC emissions from natural gas combustion</u>:

5.5 lbs VOC (a)	13.1 mmBtu (b)	1 mmcf (c)
mmcf	hr	2000 mmBtu

Where:

(a) AP-42 Chapter 1.4 (July 1998) emission factor.

(b) Maximum, combined burner capacity of the emissions unit, as provided in the permit application.

(c) Conversion rate.

(3) Maximum annual operating schedule, as provided in the permit application.

(4) Conversion rate.

*Actual VOC emissions reflect a 90% reduction in VOC for the continuous use of a thermal incinerator.

7. P035, PC Building sawing, and grinding

Operations, Property and/or Equipment Description:

PC building sawing and grinding with baghouse DC45-36. [Baghouse DC45-36 serves emissions units P035, P037, and P220.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) Visible particulate emissions (PE) from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.
		<u>Combined Emission Limit for P035, P037, and P220</u>: 6.88 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(F).
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC45-36 is shared with emissions unitsP035, P037, and P220. The annual emission rate established in this permit is inclusive of all emissions units vented to DC45-36.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf;

ii. 6.88 tons PM_{10}/year, combined for P035, P037, and P220; and

iii. Visible PE from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from

thebaghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

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

c. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0115185, issued on February 11, 2014. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0115185, issued on February 11, 2014. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

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

0.01 gr PM_{10}/dscf

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

6.88 tons PM_{10}/year, combined for P035, P037, and P220

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	18360 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P035, P037, and P220.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method

If required, compliance with the visible PE limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2016. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P035, P037, and P220. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

8. P037, #2 Black Line

Operations, Property and/or Equipment Description:

polishing and finishing of copper plated rods with baghouse DC45-36. [Baghouse DC45-36 serves emissions units P035, P037, and P220.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) Visible particulate emissions (PE) from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.
		<u>Combined Emission Limit for P035, P037, and P220</u>: 6.88 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(F).
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC45-36 is shared with emissions unitsP035, P037, and P220. The annual emission rate established in this permit is inclusive of all emissions units vented to DC45-36.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf;

ii. 6.88 tons PM_{10}/year, combined for P035, P037, and P220; and

iii. Visible particulate emissions from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from

thebaghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

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

c. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0115185, issued on February 11, 2014. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0115185, issued on February 11, 2014. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

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

0.01 gr PM_{10}/dscf

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

6.88 tons PM_{10}/year, combined for P035, P037, and P220

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	18360 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P035, P037, and P220.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method

If required, compliance with the Visible PE limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2016. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P035, P037, and P220. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

9. P051, Rotary Calciner

Operations, Property and/or Equipment Description:

natural gas-fired continuous bake process for DB-40 pellets with thermal incinerator FS-P051. [FS-P051 serves emissions units P051, P106, and P223.]

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

(1) 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 #P0115185, issued February 11, 2014]	4.60 pounds volatile organic compounds (VOC)/hour & 20.15 tons VOC/year 6.00 pounds sulfur dioxide (SO_2)/hour & 26.28 tons SO_2/year See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-11(B)(1)	1.44 pounds particulate emissions (PE)/hour
c.	OAC rule 3745-17-07(A)	Visible PE from the egress point associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-18-06(E)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C)
e.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(6); e)(1); and g)(1).

(2) Additional Terms and Conditions

a. Natural gas combustion is the only source of nitrogen oxides (NOx) and carbon monoxide (CO) emissions from this source. The potentials to emit of NOx and CO from this emissions unit are negligible; therefore, permit limits were not established pursuant to OAC rule 3745-31-05(A)(3).

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of a thermal oxidizer for the control of VOC and PE.

BAT requirements also include compliance with the requirements of OAC rules 3745-17-11(B) and 3745-17-07(A).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicator for the thermal oxidizer controlling this emissions unit is the combustion temperature within the incinerator which was established in accordance with the manufacturer's recommendations.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and 40 CFR Part 64.3(b)]

(2) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

a. The permittee shall collect and record the temperature at least once every hour during each day of operation.

b. Whenever the temperature deviates from the established value, the permittee shall restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The permittee shall promptly investigate the cause of the deviation and shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

c. 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 to within the established value unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the combustion temperature immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

d. <u>Minimum Combustion Temperature</u>

The combustion temperature within the thermal incinerator shall be maintained at or above 2,000 (≥2,000) degrees Fahrenheit, as a three-hour average, at all times when the associated emissions unit is in operation.

e. The specified value is effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio

EPA District Office or local air agency. The permittee may request revisions to the range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emissions rate(s) for this emissions unit. In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall conduct annual inspections of the control device and monitoring equipment as indicated below. At a minimum, the following shall be conducted:

a. check vacuum out the electrical panel;

b. check all electrical connections;

c. check all safety switches for proper operation;

d. check lubricant valve;

e. check lubricant fan coupling;

f. check motor bearings;

g. perform refractory inspection;

h. perform burner calibration;

i. perform temperature control calibration; and

j. perform duct work cleaning.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee shall maintain a supply of any replacement parts necessary to ensure that the thermal oxidizer will operate properly.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

4.60 pounds VOC/hour

<u>Applicable Compliance Method</u>

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

1-0.95 (1)	uncontrolled lbs VOC (2)
	hour

Where:

(1) 95% control efficiency for the destruction of VOC from the thermal incinerator, as indicated in the permit application.

(2) Total uncontrolled VOC emissions generated during the process and from natural gas combustion.

$$\frac{400 \text{ lbs}^{(a)}}{\text{hr}} \; \frac{0.23^{(b)}}{} + \frac{0.9 \text{ mmBtu}^{(c)}}{\text{hr}} \; \frac{5.5 \text{ lbs VOC}^{(d)}}{\text{mmcf}} \; \frac{\text{mmcf}^{(e)}}{1020 \text{ mmBtu}}$$

Where:

(a) Maximum process weight rate of the emissions unit, as indicated in the permit application.

(b) Maximum VOC loss rate of 23% based on weight loss of tar pitch, as indicated in the permit application.

(c) Maximum burner capacity, as indicated in the permit application.

(d) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(e) Conversion rate.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and 18, 25, or 25A.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

6.00 pounds SO_2/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

$$0.75^{(1)} \; \frac{8.00 \text{ lbs SO2}^{(2)}}{\text{hr}} + \frac{0.001 \text{ lb } SO_2^{(3)}}{\text{hr}}$$

Where:

(1) The total SO_2 emissions from the processing of this material are shared between P051 and P106. As indicated in the permit application, 75% of

the SO_2 is emitted from P051, based on process knowledge and corporate data.

(2) SO_2 emissions from sulfur loss:

400 lbs [(a)]	0.01 [(b)]	2 mol wt. SO_2[(c)]
hr		mol. Wt. S

Where:

(a) Maximum process weight rate of the emissions unit, as indicated in the permit application.

(b) Maximum sulfur loss rate of 1%, as indicated in the permit application.

(c) A factor of 2, based on the molecular weight of sulfur dioxide/molecular weight of sulfur.

(3) SO_2 emissions from natural gas combustion:

0.9 mmBtu [(a)]	0.6 lb SO_2[(b)]	mmcf[(c)]
hr	mmcf	1020 mmBtu

Where:

(a) Maximum burner capacity, as indicated in the permit application.

(b) Emission factor from U.S. EPA AP-42, Chapter 1.4 (07/1998).

(c) Conversion rate.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 6.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitations

20.15 tons VOC/year
26.28 tons SO_2/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

lbs pollutant (1)	8760 hrs (2)	1 ton (3)
hr	year	2000 lbs

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

d. Emission Limitation

1.44 pounds PE/hour

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-11(B) based on a maximum process weight rate of 400 pounds/hour, as provided in the permit application.

The actual particulate emission rate may be calculated, as follows:

400 pounds material (1)	1.3×10^{-4} lb PE (2)
hour	pound material

Where:

(1) Maximum process weight rate, as indicated in the permit application.

(2) PE emission factor, as supplied by the company in the permit application, based on stack testing conducted 12/18/1997.

If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

e. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conductedwithin 2.5 years after issuance of the permit (following the effective date for the Title V permit). The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC and SO_2.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4;

ii. 40 CFR Part 60, Appendix A, Method 18, 25, or 25(A); and

iii. 40 CFR Part 60, Appendix A, Method 6.

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*This emissions unit shares a control device (FS-P051) with emissions unit P106 and P223. Therefore, it may be necessary for all three emissions units to be in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating

parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

10. P067, Bldg. 19 Mixing

Operations, Property and/or Equipment Description:

copper mixing and HPM presses and screens with baghouse DC19-28

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 0.92 ton PM_{10}/year See b)(2)a. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 0.92 ton PM_{10}/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

0.92 ton PM_{10}/year

<u>Applicable Compliance Method</u>

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	2500 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

11. P069, Cloth/Felt Inspection Table

Operations, Property and/or Equipment Description:

cloth/felt inspection table [QA/QC of raw materials and finished product] with baghouse DC72-04

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

(1) 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 P0116202, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 1.49 tons PM_{10}/year See b)(2)a.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(1) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0116202]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0116202]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0116202]

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

0.01 gr PM_{10}/dscf

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0116202]

b. Emission Limitation

1.49 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	4000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0116202]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A).

If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

12. P073, Cement Mixing

Operations, Property and/or Equipment Description:

masonry manufacturing (storage bin, crusher, and cement mixer) with baghouse DC16-17 (vents inside Building #18)

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 1.88 tons PM_{10}/year See b)(2)a. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 1.88 tons PM_{10}/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

1.88 tons PM_{10}/year

<u>Applicable Compliance Method</u>

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	5000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

13. P076, Brush Dumping

Operations, Property and/or Equipment Description:

unloading of saggers at the brush dumping station with baghouse DC17-29

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 8.28 tons PM_{10}/year See b)(2)a. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 8.28 tons PM_{10}/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

8.28 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	22000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior

request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

14. P079, Brush Grinding

Operations, Property and/or Equipment Description:

grinding and finishing of brush blocks to finished size with baghouse DC61-51

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

(1) 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 #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 1.27 tons PM_{10}/year See b)(2)a.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

b. The permittee shall develop, implement, and maintain a Compliance Assurance Monitoring (CAM) Plan in accordance with the requirements of 40 CFR Part 64 for the control of PE from this emissions unit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

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

0.01 gr PM_{10}/dscf

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

1.27 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	3415 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

15. P094, Car Bottom Kiln #1

Operations, Property and/or Equipment Description:

natural gas-fired, car bottom kiln #1 with thermal incinerator (afterburner #1)

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

(1) 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 #P0115397, issued September 26, 2013]	1.57 pounds sulfur dioxide (SO_2)/hour & 6.88 tons SO_2/year 0.61 pound nitrogen oxides (NOx)/hour & 2.67 tons NOx/year 0.09 pound volatile organic compounds (VOC)/hour & 0.39 ton VOC/year See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-11(B)	This emissions unit is exempt from the particulate emission (PE) limitations specified in OAC rule 3745-17-11(B) [See b)(2)c.].
c.	OAC rule 3745-17-07(A)	This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h).
d.	OAC rule 3745-18-06(G)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

(2) Additional Terms and Conditions

a. The SO_2 and VOC emissions from this operation are generated from the sulfur and VOC contents of the raw materials processed in the emissions unit and from the combustion of natural gas.

b. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a thermal incinerator at all times during the operation of this emissions unit. The thermal incinerator shall be capable of achieving a 98% destruction efficiency for VOC.

c. The uncontrolled mass rate of emissions from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, since the burning of natural gas is the only source of PE from this emissions unit, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturers' recommendations, with any modifications deemed necessary by the permittee.

a. Whenever the temperature deviates from the established value, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

b. 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 to within the established value unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the combustion temperature immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

c. Minimum Combustion Temperature

The combustion temperature within the thermal incinerator shall be maintained ator above 1,300 (≥1,300) degrees Fahrenheit, as a three-hour average,at all times when the associated emissions unit is in operation.

d. The specified value is effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the specified value based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for this emissions unit. In addition, approved revisions to the specified value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and PTI #P0115397]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1)and PTI #P0115397]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)and PTI #P0115397]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

1.57 pounds SO_2/hour

<u>Applicable Compliance Method</u>

The hourly emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The emission limit was established based on the following calculation:

0.0233 lb SO_2 (1)	67 lbs carbon (2)	+	0.60 lb SO_2 (3)	1 scf (4)	6.2 mmBtu (5)
lb material	hour		mmscf natural gas	1020 Btu	hour

Where:

(1) Company provided emission factor, as indicated in the permit application.

(2) Maximum carbon production rate.

(3) AP-42, Chapter 1.4 emission factor (7/1998).

(4) Conversion rate.

(5) Maximum, hourly, natural gas input capacity of emissions unit.

b. Emission Limitation

0.09 pound VOC/hour

Applicable Compliance Method

The hourly emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The uncontrolled emission rate was calculated, as follows:

0.066 lb VOC (1)	67 lbs carbon (2)	+	5.5 lb VOC (3)	1 scf (4)	6.2 mmBtu (5)
lb material	hour		mmscf natural gas	1020 Btu	hour

Where:

(1) Company provided emission factor, as indicated in the permit application.

(2) Maximum carbon production rate.

(3) AP-42, Chapter 1.4 emission factor (7/1998).

(4) Conversion rate.

(5) Maximum, hourly, natural gas input capacity of emissions unit.

The hourly emission limitation was established by applying a 98% control efficiency to the uncontrolled emission rate for the reduction of VOC from the thermal incinerator, as follows:

4.46 lbs VOC (1)	1-0.98 (2)
hour	

Where:

(1) Uncontrolled VOC emission rate.

(2) 98% control efficiency for the use of a thermal incinerator.

c. Emission Limitation

0.61 pound NOx/hour

Applicable Compliance Method

The hourly emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, no record keepingor compliance method

calculations are required to demonstrate compliance with this limitation. The emission limit was established based on the following calculation:

100 pounds NOx (1)	1 scf (2)	6.2 mmBtu (3)
mmscf natural gas	1020 Btu	hour

Where:

(1) AP-42, Chapter 1.4 emission factor (7/1998).

(2) Conversion rate.

(3) Maximum, hourly, natural gas input capacity of emissions unit.

d. Emission Limitations

6.88 tons SO_2/year
2.67 tons NOx/year
0.39 tons VOC/year

ApplicableCompliance Method

The annual emission limitations were established based on the following calculation:

pounds pollutant (1)	8760 hours (2)	1 ton (3)
hour	year	2000 pounds

Where:

(1) SO_2, NOx, or VOC hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rates.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1)and PTI #P0115397]

g) Miscellaneous Requirements

(1) None.

16. P096, Rayon Cloth Scouring Unit

Operations, Property and/or Equipment Description:

electric cloth preheat oven and solvent dip cleaning unit with refrigerated chiller

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

(1) b)(1)b.; d)(4) through d)(7); and e)(3)

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 #P0110745, issued February 12, 2013]	12.1 pounds volatile organic compounds (VOC)/gallon 6.58 tons VOC per rolling, 12-month period See b)(2)a. and b)(2)b.
b.	ORC 3704.03(F) and OAC rule 3745-114	See d)(4) through d)(7) and e)(3).

(2) Additional Terms and Conditions

a. The VOC emission limitations are reflective of the continuous use of a refrigerated chiller during the operation of the rayon cloth scouring unit which reduces the evaporation rate of the solvents employed in this emissions unit.

b. This emissions unit does not clean metal parts. Therefore, OAC rule 3754-21-09(O) is not an applicable rule. Additionally, US EPA's 40 CFR Part 63, Subpart T is not applicable since it does not apply to the use of halogenated solvents to remove excess oil during the production of porous materials (see May 26, 1999 correspondence from U.S. EPA Region V to the permittee). The permittee cleans rayon fabric, a porous material, in this emissions unit.

c. The facility has existing records of VOC emissions in lieu of establishing monthly VOC emission restrictions for the first 12 months of operation.

c) Operational Restrictions

(1) The permittee shall install, operate, and maintain a refrigerated chiller for the rayon cloth scouring unit in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The refrigerated chiller shall be employed at all times when the rayon cloth scouring unit is in operation.

[OAC rule 3745-77-07(A)(1) and PTI #P0110745]

(2) The rayon cloth scouring unit shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:

a. The emissions unit shall be equipped with covers that shall be used to close off the entrance and exit of the unit whenever the emission unit is not in use, except during maintenance activities where it is necessary to open or remove the covers.

b. The permittee shall repair solvent leaks immediately or shut down the emissions unit.

c. Waste solvents shall only be stored in covered containers.

[OAC rule 3745-77-07(A)(1)and PTI #P0110745]

d) Monitoring and/or Recordkeeping Requirements

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

a. the company identification of each solvent employed in the cleaning unit;

b. the VOC content of each solvent employed in the cleaning unit;

c. the total amount of each solvent added to the cleaning unit, in pounds/month, excluding tank cleanout activities;

d. the total amount of all solvents added to the cleaning unit, in pounds/month, excluding tank cleanout activities [summation of d)(1)c. for all solvents employed];

e. if applicable, the total amount of solvent collected for disposal and/or recovery and shipped off-site during the month, in pounds/month, excluding tank cleanout activities;

f. the estimated, monthly VOC emission rate, in tons, excluding tank cleanout activities, [calculated as the difference between d)(1)d. and d)(1)e., divided by 2,000 pounds/ton];

g. if applicable, the estimated VOC emission rate from any tank cleanout activities, in tons [using TANKS software program]; and

h. the rolling, 12-month summation of the total VOC emission rate, in tons [including any VOC emissions from tank cleanout activities].

[OAC rule 3745-77-07(C)(1)and PTI #P0110745]

(2) In accordance with the Operational Restrictions specified in c)(1), the permittee shall document any period of time during which the refrigerated chiller was not employed during the operation of the rayon cloth scouring unit.

[OAC rule 3745-77-07(C)(1)and PTI #P0110745]

(3) In accordance with the Operational Restrictions specified in c)(2), the permittee shall documentanyperiod of time during which the rayon cloth scouring unit was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

[OAC rule 3745-77-07(C)(1)and PTI #P0110745]

(4) The permit-to-install (PTI) application for this/these emissions unit(s) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) 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(s) emitted at over one ton per year 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(s) emitted from the emissions unit(s), (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 (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (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(s), i.e., "X" hours per day and "Y" 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 Maximum Acceptable Ground-Level Concentration (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 tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Trichloroethylene

TLV (mg/m^3): 53.74

Maximum Hourly Emission Rate (lbs/hr): 1.70

Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 155.7

MAGLC ($\mu g/m^3$): 1,279.5

The permittee, has demonstrated that emissions oftoxic air contaminants, from this/these emissions unit(s), is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (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).

[PTI #P0110745]

(5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), 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 Threshold Limit Value (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(s) or its/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 PTI 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.

[PTI #P0110745]

(6) 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 Maximum Acceptable Ground-Level Concentration (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(s) 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(s) or the materials applied.

[PTI #P0110745]

(7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI #P0110745]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1)and PTI #P0110745]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1)and PTI #P0110745]

(3) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the "Toxic Air Contaminate Statute", ORC 3704.03(F), through the predicted 1-hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s);

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[PTI #P0110745]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

12.1 pounds VOC/gallon

Applicable Compliance Method

The VOC content limitation was established to reflect the worst case solvent employed in this emissions unit. Compliance with this limitation shall be demonstrated in accordance with the recordkeeping requirements in section d)(1).

b. Emission Limitation

6.58 tons VOC per rolling, 12-month period

Applicable Compliance Method

The rolling, 12-month emission limitation was established based on the following calculation:

1.70 lbs VOC (1)	8,760 hrs (2)	1 ton (2)	1 - 0.13 (3)	+Tank (4)
hour	year	2,000 lbs		Cleanout

Where:

(1) Maximum hourly usage rate/emission rate assuming a 100% solvent evaporation rate.

(2) Conversion rates.

(3) Conservative estimate of annual solvent reclamation (13%) based on existing records at the facility.

(4) The company has estimated that each tank cleanout event results in 81.37 pounds VOC, using U.S. EPA's TANKS Emission Estimation Software Program. As a worst case estimate, the emission limit includes two tank cleanout events (approximately 0.1 ton).

Compliance with this emission limitation shall be demonstrated in accordance with the recordkeeping requirements in section d)(1).

[OAC rule 3745-77-07(C)(1)and PTI #P0110745]

g) Miscellaneous Requirements

(1) None.

17. P101, Car Bottom Kiln #2

Operations, Property and/or Equipment Description:

natural gas-fired, car bottom kiln #2 with thermal incinerator (afterburner #2)

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

(1) 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 #P0115399, issued September 26, 2013]	1.57 pounds sulfur dioxide (SO_2)/hour & 6.88 tons SO_2/year 0.79 pound nitrogen oxides (NOx)/hour & 3.46 tons NOx/year 0.09 pound volatile organic compounds (VOC)/hour & 0.39 ton VOC/year See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-11(B)	This emissions unit is exempt from the particulate emission (PE) limitations specified in OAC rule 3745-17-11(B) [See b)(2)c.].
c.	OAC rule 3745-17-07(A)	This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h).
d.	OAC rule 3745-18-06(G)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(B).

(2) Additional Terms and Conditions

a. The SO_2 and VOC emissions from this operation are generated from the sulfur and VOC contents of the raw materials processed in the emissions unit and from the combustion of natural gas.

b. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a thermal incinerator at all times during the operation of this emissions unit. The thermal incinerator shall be capable of achieving a 98% destruction efficiency for VOC.

c. The uncontrolled mass rate of emissions from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, since the burning of natural gas is the only source of PE from this emissions unit, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording device shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

a. Whenever the temperature deviates from the temperature specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the names of the personnel who conducted the investigation; and

iv. 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 below, 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.

b. The permittee shall maintain records of the following information for each corrective action taken:

i. a description of the corrective action;

ii. the date it was completed;

iii. the date and time the deviation ended;

iv. the total period of time (in minutes) during which there was a deviation, the temperature reading immediately after the corrective action; and

v. the names of the personnel who performed the work.

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

c. The combustion temperature within the thermal incinerator shall be maintained at or above 1,300 degrees Fahrenheit, as a three-hour average, at all times when the associated emissions unit is in operation.

(2) The minimum temperature is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. Approved temperature revisions will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit to install by means of an administrative permit modification.

[OAC rule 3745-77-07(C)(1) and PTI #P0115399]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each period of time when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1) and PTI #P0115399]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0115399]

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

1.57 pounds SO_2/hour

Applicable Compliance Method

The hourly emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, no record keeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. The emission limit was established based on the following calculation:

0.0233 lb SO_2 (1)	67 lbs carbon (2)	+	0.60 lb SO_2 (3)	1 scf (4)	8.1 mmBtu (5)
lb material	hour		mmscf natural gas	1020 Btu	hour

Where:

(1) Company provided emission factor, as indicated in the permittee's application.

(2) Maximum carbon production rate.

(3) AP-42, Chapter 1.4 emission factor (7/1998).

(4) Conversion rate.

(5) Maximum, hourly, natural gas input capacity of emissions unit.

b. Emission Limitation

0.09 pound VOC/hour

Applicable Compliance Method

The hourly emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, no record keeping, deviation reporting or

compliance method calculations are required to demonstrate compliance with this limitation. The emission limit was established based on the following calculation:

0.066 lb VOC (1) / lb material	67 lbs carbon (2) / hour	+	5.5 lb VOC (3) / mmscf natural gas	1 scf (4) / 1020 Btu	8.1 mmBtu (5) / hour

Where:

(1) Company provided emission factor, as indicated in the permittee's application.

(2) Maximum carbon production rate.

(3) AP-42, Chapter 1.4 emission factor (7/1998).

(4) Conversion rate.

(5) Maximum, hourly, natural gas input capacity of emissions unit.

The hourly emission limitation was established by applying a 98% control efficiency to the uncontrolled emission rate for the reduction of VOC from the thermal incinerator, as follows:

4.47 lbs VOC (1) / hour	1-0.98 (2)

Where:

(1) Uncontrolled VOC emission rate.

(2) 98% control efficiency for the use of a thermal incinerator.

c. Emission Limitation

0.79 pound NOx/hour

Applicable Compliance Method

The hourly emission limitation was established to reflect the potential to emit for this emissions unit. Therefore, no record keeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. The emission limit was established based on the following calculation:

100 pounds NOx (1) / mmscf natural gas	1 scf (2) / 1020 Btu	8.1 mmBtu (3) / hour

Where:

(1) AP-42, Chapter 1.4 emission factor (7/1998).

(2) Conversion rate.

(3) Maximum, hourly, natural gas input capacity of emissions unit.

d. Emission Limitations

6.88 tons SO_2/year
3.46 tons NOx/year
0.39 tons VOC/year

Applicable Compliance Method

The annual emission limitations were established based on the following calculation:

pounds pollutant (1)	8760 hours (2)	1 ton (2)
hour	year	2000 pounds

Where:

(1) SO_2, NOx, or VOC hourly emission limitation.

(2) Conversion rates.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1)and PTI #P0115399]

g) Miscellaneous Requirements

(1) None.

18. P105, Graphite Coke Screening System

Operations, Property and/or Equipment Description:

graphite coke screening system with baghouse DC61-03

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

(1) 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 #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 5.26 tons PM_{10}/year See b)(2)a.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any

corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

b. <u>Emission Limitation</u>

5.26 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	14000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2018. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

19. P106, Vertical Calciner

Operations, Property and/or Equipment Description:

indirect, electric-powered, vertical shaft calciner with thermal incinerator FS-P051 [FS-P051 also serves emissions units P051 and P223]

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

(1) 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 #P0115746, issued February 11, 2014]	0.10 pound particulate emissions (PE)/hour; 0.31 ton PE/year [See b)(2)a.] 1.57 pounds carbon monoxide (CO)/hour; 4.79 tons CO/year 2.00 pounds sulfur dioxide (SO_2)/hour; 6.10 tons SO_2/year Control Requirements [See b)(2)b.]
b.	OAC rule 3745-17-07(A)	Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-18-06(E)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(C).

(2) Additional Terms and Conditions

a. All particulate emissions are assumed to be particulate matter ≤ 10 microns in size (PM_{10}).

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be use of a thermal incinerator and compliance with the emission limitations established pursuant to OAC rule 3745-17-07(A). The thermal incinerator shall be employed at all times during the operation of this emissions unit.

c. The volatile organic compound (VOC) emission rate from this emissions unit is negligible. However, it contributes to the overall VOC emission rate from the thermal incinerator (FS-P051) associated with this emissions unit, P051, and P223.

The potential VOC emission rate from this emissions unit is 0.0006 pound/hour and 0.0018 ton/year and may be calculated, as follows:

400 lbs material (1)	6.76×10^{-5} lbs VOC(2)	1-0.98 (3)	6100 hrs (4)	1 ton (5)
hour	lb material		year	2000 lbs

Where:

(1) Maximum process weight rate, as indicated in the permittee's application.

(2) VOC emission factor, as supplied by the company in the permit application, based on stack testing conducted on a similar emissions unit (P119 – Furnace 45).

(3) A 98% thermal incineration control efficiency for the removal of VOC emissions.

(4) Maximum annual operating schedule, as provided in the permit application, based on extreme maintenance requirements.

(5) Conversion rate.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor which measures the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturers' recommendations, with any modifications deemed necessary by the permittee.

a. The permittee shall collect and record the temperature at least once every hour during each day of operation.

b. Whenever the temperature deviates from the established value, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

c. 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 to within the established value unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the combustion temperature immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

d. Minimum Combustion Temperature

The combustion temperature within the thermal incinerator shall be maintained ator above 2,000 (≥2,000) degrees Fahrenheit, as a three-hour average,at all times when the associated emissions unit is in operation.

e. The specified value is effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rate(s) for this emissions unit. In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and PTI #P0115746]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly deviation (excursion) reports the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature fell below the acceptable value, as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1) and PTI #P0115746]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0115746]

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

0.1 pound PE/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keeping, deviation reporting or compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

$$\left|\frac{400 \text{ pounds material}^{(1)}}{\text{hour}}\right| \quad \left|\frac{1.3\text{x}10^{-4} \text{ lbs PE}^{(2)}}{\text{pound material}}\right|$$

Where:

(1) Maximum process weight rate, as indicated in the permittee's application.

(2) PE emission factor, as supplied by the company in the permit application, based on stack testing conducted 12/18/1997 on a similar emissions unit (P051).

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 5 and 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115398]

b. Emission Limitation

1.57 pounds CO/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the thermal incinerator while the

emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

400 pounds material [(1)]	3.92×10^{-3} lb CO [(2)]
hour	pound material

Where:

(1) Maximum process weight rate, as indicated in the permit application.

(2) CO emission factor, as supplied by the company in the permit application, based on stack testing conducted on a similar emissions unit (P119 – Furnace 45).

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and 10.

[OAC rule 3745-77-07(C)(1) and PTI #P0115746]

c. Emission Limitation

2.00 pounds SO_2/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the thermal incinerator while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

0.25 [(1)]	8.00 lbs SO2 [(2)]
	hr

Where:

(1) The total SO_2 emissions from the processing of this material are shared between P051 and P106. As indicated in the permit application, 25% of the SO_2 is emitted from P106, based on process knowledge and corporate data.

(2) SO_2 emissions from sulfur loss:

400 lbs [(a)]	0.01 [(b)]	2 mol wt. SO_2 [(c)]
hr		mol. Wt. S

Where:

(a) Maximum process weight rate of the emissions unit, as indicated in the permit application.

(b) Maximum sulfur loss rate of 1%, as indicated in the permit application.

(c) A factor of 2, based on the molecular weight of sulfur dioxide/molecular weight of sulfur.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 6.

[OAC rule 3745-77-07(C)(1) and PTI #P0115746]

d. Emission Limitations

0.31 ton PE/year
4.79 tons CO/year
6.10 tons SO_2/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

pound pollutant (1)	6,100 hours (2)	1 ton (3)
hour	year	2,000 pounds

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application, based on extreme maintenance requirements.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115746]

e. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

20. P119, Furnace G-1

Operations, Property and/or Equipment Description:

B-H line electric graphitizing furnaces (7 furnace lines; 45 total furnaces – Buildings #28 & #61)

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

(1) 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 #P0115568, issued November 4, 2013]	1.22 pounds particulate emissions (PE)/hour & 5.34 tons PE/year [See b)(2)a.] 3.51 pounds carbon monoxide (CO)/hour & 15.37 tons CO/year 0.06 pound volatile organic compounds (VOC)/hour & 0.26 ton VOC/year See b)(2)b.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. All particulate emissions are assumed to be particulate matter ≤ 10 microns in size (PM_{10}).

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with the emission limitations established pursuant to OAC rule 3745-31-05(A) and the requirements of OAC rule 3745-17-07(A).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115568]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115568]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in

accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115568]

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 Limitations

1.22 pounds PE/hour
3.51 pounds CO/hour
0.06 pound VOC/hour

Applicable Compliance Method

The hourly emission limitations represent the potential to emit (PTE) for this emissions unit. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with these limitations. The hourly PTE may be calculated, as follows:

$$\frac{896 \text{ pounds material}^{(1)}}{\text{hour}} \quad \frac{\text{pound pollutant}^{(2)}}{\text{pound material}}$$

Where:

(1) Maximum process weight rate, as indicated in the permit application.

(2) Pollutant-specific emission factor, as supplied by the company in the permit application, based on internal stack testing conducted on Furnace #45 which is included in this emissions unit.

PE	1.36×10^{-3} pound PE/pound material
CO	3.92×10^{-3} pound CO/pound material
VOC	6.76×10^{-5} pound VOC/pound material

If required, compliance with the emission limitations shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Method 10 (CO) and/or Methods 18, 25, or 25A, as appropriate (VOC) and/or Method 5 (PE) and 40 CFR Part 51, Appendix M, Methods 201/201A and 202 (PM_{10}).

[OAC rule 3745-77-07(C)(1) and PTI #P0115568]

b. Emission Limitations

5.34 tons PE/year
15.37 tons CO/year
0.26 ton VOC/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

pound pollutant (1)	8,760 hours (2)	1 ton (3)
hour	year	2,000 pounds

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115568]

c. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A).

If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

21. P124, CNC Lathe 1

Operations, Property and/or Equipment Description:

CNC lathe 1 with baghouse DC67-01

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

(1) 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 #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 2.23 tons PM_{10}/year See b)(2)a.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack

serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

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

0.01 gr PM_{10}/dscf

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

b. Emission Limitation

2.23 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	6000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

22. P126, North Raymond Mill

Operations, Property and/or Equipment Description:

North Raymond mill with baghouse DC42-52. [Baghouse DC42-52 serves emissions units P011, P126, P127, P129, P130, and P219.]

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

(1) 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 #P0115185, issued February 11, 2014]	See b)(2)a. and b)(2)b. 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf)
		<u>Combined Emission Limit for P011, P126, P127, P129, P130, and P219</u>: 12.00 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC42-52 is shared with emissions unitsP011, P127, P129, P130, and P219. The annual emission rate established in this permit is inclusive of all emissions units vented to DC42-52.

b. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	32000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P011, P126, P127, P129, P130, and P219.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

   i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

   ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

   Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

   *The control device associated with this emissions unit serves P011, P126, P127, P129, P130, and P219. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following

completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

23. P127, South Raymond Mill

Operations, Property and/or Equipment Description:

South Raymond mill with baghouse DC42-52. [Baghouse DC42-52 serves emissions units P011, P126, P127, P129, P130, and P219.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf)
		<u>Combined Emission Limit for P011, P126, P127, P129, P130, and P219</u>: 12.00 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC42-52 is shared with emissions unitsP011, P126, P127, P129, P130, and P219. The annual emission rate established in this permit is inclusive of all emissions units vented to DC42-52.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable

emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions

unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	32000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P011, P126, P127, P129, P130, and P219.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P011, P126, P127, P129, P130, and P219. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire

data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

24. P128, JB Mill

Operations, Property and/or Equipment Description:

JB mill with baghouse DC42-48.

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 2.06 tons PM_{10}/year See b)(2)a. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 2.06 tons PM_{10}/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

2.06 tons PM_{10}/year

<u>Applicable Compliance Method</u>

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	5500 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

25. P129, East Double Ram Press/Flour Bin

Operations, Property and/or Equipment Description:

East double ram press/flour bin with baghouse DC42-52. [Baghouse DC42-52 serves emissions units P011, P126, P127, P129, P130, and P219.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf)
		<u>Combined Emission Limit for P011, P126, P127, P129, P130, and P219</u>: 12.00 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC42-52 is shared with emissions unitsP011, P126, P127, P129, P130, and P219. The annual emission rate established in this permit is inclusive of all emissions units vented to DC42-52.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable

emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions

unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	32000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P011, P126, P127, P129, P130, and P219.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P011, P126, P127, P129, P130, and P219. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire

data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

26. P130, West Double Ram/Press Flour Bin

Operations, Property and/or Equipment Description:

West double ram/press flour bin with baghouse DC42-52. [Baghouse DC42-52 serves emissions units P011, P126, P127, P129, P130, and P219.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf)
		<u>Combined Emission Limit for P011, P126, P127, P129, P130, and P219</u>: 12.00 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC42-52 is shared with emissions unitsP011, P126, P127, P129, P130, and P219. The annual emission rate established in this permit is inclusive of all emissions units vented to DC42-52.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable

emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions

unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	32000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P011, P126, P127, P129, P130, and P219.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P011, P126, P127, P129, P130, and P219. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire

data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

27. P215, Chemical Room

Operations, Property and/or Equipment Description:

material blending with baghouse DC42-44

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 4.86 tons PM_{10}/year See b)(2)a. and c)(1).
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 4.86 tons PM_{10}/year.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

b. Emission Limitation

4.86 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	13000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1)and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1)and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2018. The testing time frame specified may be amended or waived for cause upon prior

request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

28. P217, Pipe and Tube Process

Operations, Property and/or Equipment Description:

pipe and tube process (pipe cleaning, sawing, and pipe and tube pit packing) with baghouse DC17-39

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

(1) 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 #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 3.64 tons PM_{10}/year See b)(2)a.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit include the use of a baghouse at all times during the operation of this emissions unit. The baghouse shall be capable of achieving 0.01 grain PM_{10}/dscf.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any

corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

3.64 tons PM_{10}/year

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	9650 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2018. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

29. P218, Farrel Mixer-Fume

Operations, Property and/or Equipment Description:

Fume exhaust from Farrel Mixer (Building #42)

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

(1) 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.	None	None

(2) Additional Terms and Conditions

a. Pursuant to OAC rule 3745-31-01, this emissions unit is not a “new source” and is not subject to any requirements of the SIP approved versions of OAC Chapters 3745-17, 3745-18, or 3745-21.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) None.

g) Miscellaneous Requirements

(1) For the purposes of federal enforceability, this emissions unit has the potential to emit the following pollutants that do not have any SIP requirements:

a. 8.89 tons VOC/year

1,125 lbs [1]	1.80×10^{-3} lb VOC [2]	8,760 hours [3]	1 ton [4]
hour	pound	year	2,000 lbs

Where:

[1] Maximum process weight rate, as indicated in the permit application.

[2] VOC emission factor, as supplied by the company in the permit application, based on emission testing conducted on 10/24/2013 on similar emissions units.

[3] Maximum annual operating schedule, as provided in the permit application.

[4] Conversion rate.

30. P219, MicroMill System

Operations, Property and/or Equipment Description:

micromill system with baghouse DC42-52. [Baghouse DC42-52 serves emissions units P011, P126, P127, P129, P130, and P219.]

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf)
		<u>Combined Emission Limit for P011, P126, P127, P129, P130, and P219</u>: 12.00 tons PM_{10}/year
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
c.	OAC rule 3745-17-07(A)	Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(7); e)(2); and g)(1).

(2) Additional Terms and Conditions

a. Baghouse DC42-52 is shared with emissions unitsP011, P126, P127, P129, P130, and P219. The annual emission rate established in this permit is inclusive of all emissions units vented to DC42-52.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable

emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf; and

ii. 12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(3)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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions

unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitation

12.00 tons PM_{10}/year, combined for P011, P126, P127, P129, P130, and P219

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	32000 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P011, P126, P127, P129, P130, and P219.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the baghouse stack associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2020. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P011, P126, P127, P129, P130, and P219. Therefore, it may be necessary to have all emissions units in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire

data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

31. P220, CREE machining line

Operations, Property and/or Equipment Description:

CREE machining line (saw, lathe turning equipment, and CNC machine) with baghouse DC45-36. [Baghouse DC45-36 serves emissions units P035, P037, and P220.]

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

(1) 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(F) [PTI #P0115396, issued February 11, 2014]	See b)(2)a., b)(2)b., and c)(1). 0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) Visible particulate emissions (PE) from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.
		<u>Combined Emission Limit for P035, P037, and P220</u>: 6.88 tons PM_{10}/year
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	0.01 grain PM_{10}/dscf [See b)(2)c.]
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)d.
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
e.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(F).
d.	40 CFR Part 64 – Compliance	See d)(1) through d)(7); e)(2); and g)(1).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Assurance Monitoring (CAM)	

(2) Additional Terms and Conditions

a. Baghouse DC45-36 is shared with emissions unitsP035, P037, and P220. The annual emission rate established in this permit is inclusive of all emissions units vented to DC45-36.

b. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf;

ii. 6.88 tons PM_{10}/year, combined for P035, P037, and P220; and

iii. Visible particulate emissions from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

c. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be compliance with the 0.01 grain PM_{10}/dscf restriction established in accordance with OAC rule 3745-31-05(F) [See b)(2)b.].

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

It should also be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the PM_{10} emissions

from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the practically and legally enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)b.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115396]

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of particulate emissions. The CAM performance indicator for the baghouse controlling this emissions unit is a daily visible emission observation of the baghouse stack.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

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

c. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) Whenever abnormal visible emissions are observed, the permittee shall take prompt corrective action to restore operation of the emissions unit and/or its control equipment

to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) Investigation and records required by the monitoring and recordkeeping requirements 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.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee has developed an inspection and maintenance program for the baghouse to be conducted once every six (6) months. The semi-annual inspections shall include, but not limited to:

a. checking the bags / filters for deterioration or degradation;

b. checking the cleaning system for proper operation; and

c. checking the hoppers and conveyance systems for proper operation.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to:

a. filter media;

b. appropriate controller replacement parts;

c. diaphragms and diaphragm seal kits or replacement units;

d. spare set of belts or replacement units; and

e. spare bearings for blower motor or replacement units.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(8) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0115396, issued on February 11, 2014. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115396]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0115396]

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0115396, issued on February 11, 2014. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) for these emissions units based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

b. Emission Limitation

6.88 tons PM_{10}/year, combined for P035, P037, and P220

Applicable Compliance Method

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	18360 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Combined, maximum outlet gas flow rate of the baghouse, as supplied in the permit application, for emissions units P035, P037, and P220.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emissions limitations shall also be demonstrated.

c. Emission Limitation

Visible PE from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method

If required, compliance with the Visible PE limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0115396]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than June 30, 2016. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval from, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PM_{10}.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*The control device associated with this emissions unit serves P035, P037, and P220. Therefore, it may be necessary for all emissions units to be in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

32. P221, Chlorine Furnace

Operations, Property and/or Equipment Description:

Purification furnace system consisting of four (4) stationary, electric firing stations, 28 interchangeable chlorine-blanketed electric bake furnaces, and a wet scrubber

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

(1) 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 #03-17256, issued January 18, 2007]	0.02 pound particulate matter ≤ 10 microns in size (PM_{10})/hour & 0.09 ton PM_{10}/year 0.12 pound chlorine/hour & 0.53 ton chlorine/year Visible particulate emissions (PE) shall not exceed 0% opacity, as a 6-minute average. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee has requested voluntary allowable emission limitations of:

i. 0.02 pound PM_{10}/hour and 0.09 ton PM_{10}/year; and

ii. 0.12 pound chlorine/hour and 0.53 ton chlorine/year.

The hourly and annual emission limitations for PM_{10} and chlorine are beingestablished as practically and legally enforceable requirements representing thepotential to emit based on the use of a wet scrubber that can achieve a controlefficiency of 98% for the removal of particulate matter emissions and 99.8% forthe removal of chlorine.

b. All particulate emissions are PM_{10}.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly operate and maintain equipment to continuously monitorthe static pressure drop across the scrubber water flow rate, and the pH of thescrubber liquor while the emissions unit is in operation. The monitoring devices andany recorders shall be calibrated, operated, and maintained in accordance with themanufacturer's recommendations, instructions, and operating manuals.

a. The permittee shall collect and record the following information during each day of operation:

i. the static pressure drop across the scrubber, in inches of water, on a once-per-shift basis;

ii. the scrubber water flow rate, in gallons per minute, on a once-per-shift basis; and

iii. the pH of the scrubber liquor, on a once-per-day basis.

b. During each day of operation, the permittee shall collect and record operating times for the following:

i. the capture (collection) system;

ii. the control device;

iii. the monitoring equipment; and

iv. the associated emissions unit.

c. Whenever the monitored values for the pressure drop, water flow rate, and/or scrubber liquor pH deviate from the value/ranges specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

d. 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 value/range(s) specified below, unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the pressure drop, scrubber water flow rate, and scrubber liquor pH immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

e. <u>Pressure Drop Indicator Range</u>

The pressure drop across the scrubber shall be maintained between the range of 20 – 40 inches of water at all times while the emissions unit is in operation, or as established during the most recent performance test that demonstrated the emissions unit was in compliance.

f. <u>Scrubber Water Flow Rate Indicator Range</u>

The scrubber water flow rate shall be maintained at a value of not less than 4 gallons per minute (≥4 gpm) at all times while the emissions unit is in operation,

or as established during the most recent performance test that demonstrated the emissions unit was in compliance.

g. Scrubber Liquor pH

The scrubber liquor pH shall be maintained between the range of 9 – 11 while the emissions unit is in operation, or as established during the most recent performance test that demonstrated the emissions unit was in compliance.

h. The specified value/ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the specified value/range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emissions rate(s) for this emissions unit. In addition, approved revisions to the specified value/range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and PTI #03-17256]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall also include in the quarterly report, the following information concerning the operation of the control equipment:

i. each incident when the pressure drop across the scrubber deviated from the acceptable range;

ii. each incident when the scrubber water flow rate deviated from the acceptable value;

iii. each incident when the scrubber liquor pH deviated from the acceptable range;

iv. each incident of deviation identified in e)(1)a.i., e)(1)a.ii., and/or e)(1)a.iii. where a prompt investigation was not conducted;

v. each incident of deviation identified in e)(1)a.i., e)(1)a.ii., and/or e)(1)a.iii. where prompt corrective action was determined to be necessary and was not taken; and

vi. each incident of deviation identified in e)(1)a.i., e)(1)a.ii., and/or e)(1)a.iii. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1) and PTI #03-17256]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #03-17256]

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

0.02 pound PM_{10}/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the scrubber while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

102.03 pounds (1) / hour	0.01 ash (2)	1-0.98 (3)

Where:

(1) The maximum furnace payload to the scrubber, as provided in the PTI application.

(2) A maximum ash content of 1%, as provided in the PTI application.

(3) A 98% scrubber control efficiency for the removal of particulate matter emissions.

If required, compliance with the hourly emission limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 – 4 and 40 CFR Part 51, Appendix M, Methods 201/201A and 202. Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(C)(1) and PTI #03-17256]

b. Emission Limitation

0.12 pound chlorine/hour

Applicable Compliance Method

The hourly emission limitation represents the potential to emit (PTE) for this emissions unit based on the continuous use of the scrubber while the emissions unit is in operation. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with this limitation. The hourly PTE may be calculated, as follows:

300 cu. ft chlorine/freon-22 (1)	0.2 lb chlorine (2)	1-0.99.8 (3)
hour	cu. ft.	

Where:

(1) The maximum chlorine/Freon-22 gas usage rate, as provided in the PTI application.

(2) The maximum chlorine content, as provided in the PTI application.

(3) A 99.8% scrubber control efficiency for the removal of chlorine.

If required, compliance with the hourly emission limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 – 4 and 26. Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

[OAC rule 3745-77-07(C)(1) and PTI #03-17256]

Emission Limitations

0.09 ton PM_{10}/year

0.53 ton chlorine/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

pound pollutant (1)	8,760 hours (2)	1 ton (3)
hour	year	2,000 pounds

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emission limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #03-17256]

c. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.

33. P223, Rigid Board Processing Line

Operations, Property and/or Equipment Description:

rigid board processing line - mixing, molding, electric drying ovens (20), electric char ovens (10), and electric high fire ovens (6) with thermal incineration (FS-P051 and TO223-1)

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

(1) b)(1)b. and b)(2)d.; d)(7) through d)(12); and e)(2).

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 #P0109555, issued May 9, 2012]	See b)(2)a. and b)(2)b. <u>Drying Ovens</u>: 4.00 pounds OC/hour&17.52 tons OC/year <u>Char and High Fire Ovens with Thermal Oxidizers</u>: 0.57 pound OC/hour&2.50 tons OC/year
b.	ORC 3704.03(F)(4)(c) OAC rule 3745-114	19.92 pounds formaldehyde/day (from the drying ovens) See b)(2)d., d)(8) through d)(13), and e)(3).
c.	40 CFR Part 64 – Compliance Assurance Monitoring (CAM)	See d)(1) through d)(6); e)(1); and g)(1).

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) control requirement(s) for this emissions unit has been determined to be the use of thermal incineration for the char and high fire ovens in order to achieve a 99% control efficiency for the reduction of OC emissions from those operations. There are two thermal incinerators associated with this emissions unit:

i. FS-P051, which also controls OC emissions from P051 (Rotary Calciner) and P106 (Electrical Vertical Calciner); and

ii. TO223-1.

b. For the purpose of federal enforceability, organic compound (OC) emission limitations will effectively restrict volatile organic compound (VOC) emissions.

c. The OC emission limitations of 4.00 pounds/hour from the drying ovens and 0.57 pounds/hour from the char and high fire ovens represent the potential to emit for this emissions unit from the respective processes. Therefore, no hourly record keeping or compliance method calculations are required to demonstrate compliance with these limitations.

d. In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the Director has established, per ORC 3704.03(F)(4)(c), a limit for formaldehyde, which shall not exceed 19.92 pounds per day. This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A CAM plan for this emissions unit has been developed for the control of VOC emissions. The CAM performance indicators for the thermal oxidizers controlling this emissions unit are the combustion temperatures within the incinerators which were established in accordance with the manufacturer's recommendations.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and 40 CFR Part 64.3(b)]

(2) At all times, the permittee shall maintain the monitoring, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

a. The permittee shall collect and record the temperature at least once every hour during each day of operation.

b. Whenever the temperature deviates from the established value, the permittee shall restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

The permittee shall promptly investigate the cause of the deviation and shall maintain records of the following information for each investigation:

i. the date and time the deviation began and the magnitude of the deviation at that time;

ii. the date(s) the investigation was conducted;

iii. the name(s) of the personnel who conducted the investigation; and

iv. the findings and recommendations.

c. 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 to within the established value unless the permittee determines that corrective action is not necessary.

i. The permittee shall maintain records of the following information for each deviation when it was determined that corrective action was not necessary:

(a) the reason corrective action was not necessary; and

(b) the date and time the deviation ended.

ii. The permittee shall maintain records of the following information for each deviation when corrective action was taken:

(a) a description of the corrective action;

(b) the date it was completed;

(c) the date and time the deviation ended;

(d) the total period of time (in minutes) during which there was a deviation;

(e) the combustion temperature immediately after the corrective action; and

(f) the name(s) of the personnel who performed the work.

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

d. Minimum Combustion Temperatures

The combustion temperatures within the thermal incinerators shall be maintained at or above the following temperatures at all times when the associated emissions unit(s) is/are in operation:

i. Thermal Incinerator FS-P051:

≥2,000 degrees Fahrenheit (1,093 degrees Celsius), as a three-hour average; and

ii. Thermal Incinerator TO223-1:

≥1,550 degrees Fahrenheit (843 degrees Celsius), as a three-hour average.

e. The specified valuesare effective for the duration of this permit, unless revisions are requested by the permittee and approved, in writing, by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable emissions rate(s) for this emissions unit. In addition, approved revisions to the range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor modification.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(5) The permittee shall conduct annual inspections of the control device and monitoring equipment as indicated below. At a minimum, the following shall be conducted:

a. check vacuum out the electrical panel;

b. check all electrical connections;

c. check all safety switches for proper operation;

d. check lubricant valve;

e. check lubricant fan coupling;

f. check motor bearings;

g. perform refractory inspection;

h. perform burner calibration;

i. perform temperature control calibration; and

j. perform duct work cleaning.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(6) The permittee shall maintain a supply of any replacement parts necessary to ensure that the thermal oxidizer will operate properly.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(7) The permit for this emissions unit was evaluated based on information contained in the permit to install application. Prior to any physical change or change in the method of operation involving the rigid board processing line, the permittee shall conduct an evaluation to determine if the change would constitute a "modification" as defined in OAC rule 3745-31-01. If any physical change in, or change(s) in the method of operation is (are) defined as a modification, then the permittee shall obtain a final permit to install modification prior to performing such change. The permittee shall collect, record and retain all evaluation information and the final determination when modification evaluations are performed.

[PTI #P0109555]

(8) The permit to install application for this/these emissions unit(s) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) 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(s) emitted using an air dispersion model such as SCREEN 3.0, 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(s) emitted from the emissions unit(s), (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 (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (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(s), i.e., "X" hours per day and "Y" 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 Maximum Acceptable Ground-Level Concentration (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 or "worst case" toxic contaminant(s):

Toxic Contaminant: Formaldehyde
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 6.39
MAGLC ($\mu g/m^3$): 6.47

The permittee, having demonstrated that emissions of formaldehyde, from emissions unit(s) P223, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and 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).

Toxic Contaminant: Phenol
Maximum Hourly Emission Rate (lbs/hr): 2.02
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 13.94
MAGLC ($\mu g/m^3$): 458.22

The permittee, has demonstrated that emissions of phenol, from emissions unit(s) P223, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (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).

[PTI #P0109555]

(9) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), 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 Threshold Limit Value (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(s) or its/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", ORC 3704.03(F), 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", or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

[PTI #P0109555]

(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":

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 Maximum Acceptable Ground-Level Concentration (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(s) 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(s) or the materials applied.

[PTI #P0109555]

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03 (F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI #P0109555]

(12) In order to demonstrate compliance with the daily formaldehyde emission limit, the permittee shall collect and record the following information each day:

a. the production rate from the drying operation, in cubic inches/day; and

b. the formaldehyde emission rate, in pounds/day, as calculated below:

$$\frac{\text{cubic inches}^{(1)}}{\text{day}} \quad \frac{\text{7.889 E-05 pound formaldehyde}^{(2)}}{\text{cubic inch}}$$

Where:

(1) Daily process throughput of rigid boards through the drying operation, as measured in d)(7)a.

(2) Company supplied emission factor.

[PTI #P0109555]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall also include in the quarterly report, the following information concerning the operation of the control equipment during the operation of this emissions unit:

i. each incident when the combustion temperature(s) fell below the acceptable value(s), as a three-hour average;

ii. an identification of each incident of deviation described in e)(1)a.i. where a prompt investigation was not conducted;

iii. an identification of each incident of deviation described in e)(1)a.i. where prompt corrective action that would bring the average temperature into compliance with the acceptable range, was determined to be necessary and was not taken; and

iv. an identification of each incident of deviation described in e)(1)a.i. where proper records were not maintained for the investigation and/or the corrective action.

[OAC rule 3745-77-07(C)(1); 40 CFR Part 64; and PTI #P0109555]

(2) The permittee shall submit quarterly deviation reports, to the appropriate Ohio EPA District Office or local air agency, documenting any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC. The permittee shall also report any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that was used to maintain compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

[PTI #P0109555]

(3) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0109555]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

4.00 pounds OC/hour from the drying ovens

Applicable Compliance Method

The OC emission limitation of 4.00 pounds/hour represents the potential to emit for this operation. Therefore, no hourly record keeping or compliance method calculations are required to demonstrate compliance with this limitation. The potential to emit was determined using the following equation:

$$\frac{20{,}484\ in^{3(1)}}{hour} \left| \frac{1.955 \times 10^{-04}\ lb\ OC^{(2)}}{in^3} \right|$$

Where,

(1) Maximum hourly process throughput of the rigid board line, measured from the high fire ovens, as supplied in the permit application.

(2) Company supplied emission factor for the drying ovens derived from mass balance calculations and off-gas analysis.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

[OAC rule 3745-77-07(C)(1) and PTI #P0109555]

b. Emission Limitation

0.57 pounds OC/hour from the char and high fire ovens

Applicable Compliance Method

The OC emission limitation of 0.57 pounds/hour represents the potential to emit for this operation. Therefore, no hourly record keepingor compliance method calculations are required to demonstrate compliance with this limitation.

The potential to emit was determined by combining the potential hourly emissions from the char and high fire ovens, in accordance with the following equation:

$$\frac{20{,}484\ in^{3(1)}}{hour} \left| \frac{6.981 \times 10^{-04}\ lb\ OC^{(2)}}{in^3} \right| \frac{1-0.99^{(3)}}{} \Bigg| + \frac{20{,}484\ in^{3(1)}}{hour} \left| \frac{2.09 \times 10^{-03}\ lb\ OC^{(4)}}{in^3} \right| \frac{1-0.99^{(3)}}{} \Bigg|$$

Where,

(1) Maximum hourly process throughput of the rigid board line, measured from the high fire ovens, as supplied in the permit application.

(2) Company supplied emission factor for the char ovens derived from mass balance calculations and off-gas analysis.

(3) Control efficiency for the 99% reduction of OC due to thermal incineration.

(4) Company supplied emission factor for the high fire ovens derived from mass balance calculations and off-gas analysis.

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation above in accordance with 40 CFR Part 60 Appendix A, Methods 1 through 4 and 18, 25, or 25A, as appropriate.

[OAC rule 3745-77-07(C)(1) and PTI #P0109555]

c. Emission Limitations

17.52 tons OC/year from the drying ovens

2.50 tons OC/year from the char and high fire ovens

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

pounds OC (1)	8760 hours (2)	1 ton (3)
hour	year	2000 pounds

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion factor.

Therefore provided compliance is demonstrated with the hourly emission limitations, compliance with the annual emission limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0109555]

d. Emission Limitation

19.92 pounds formaldehyde/day (from the drying ovens)

Applicable Compliance Method

The permittee shall demonstrate compliance with this emission limitation in accordance with the recordkeeping requirements specified in condition d)(7).

[PTI #P0109555]

(2) Emission Testing Requirements

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conductedwithin 2.5 years after issuance of the permit (following the effective date for the Title V permit). The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the appropriate Ohio EPA District Office or local air agency.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for VOC and SO_2.

c. The following test method(s) shall be employed:

i. 40 CFR Part 60, Appendix A, Methods 1 – 4; and

ii. 40 CFR Part 60, Appendix A, Method 18, 25, or 25(A).

Alternative U.S. EPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

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

*This emissions unit is controlled by two thermal incinerators, FS-P051 and TO223-1. FS-P051 also controls emissions from emissions units P051 and P106. Therefore, it may be necessary for all three emissions units to be in operation during the stack test.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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

[OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) Based upon the results of a determination made under 40 CFR 64.7(d)(2), the Administrator or the permitting authority may require the permittee to develop and implement a Quality Improvement Plan (QIP) pursuant to 40 CFR Part 64.8.

[OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

34. P229, Rigid Board Sawing

Operations, Property and/or Equipment Description:

rigid board sawing with baghouse DC45-06

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	0.01 grain particulate matter ≤ 10 microns (PM_{10})/dry standard cubic foot (dscf) 2.80 tons PM_{10}/year Visible particulate emissions (PE) from thebaghouse stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average. See b)(2)a. and c)(1).
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	0.01 grain PM_{10}/dscf [See b)(2)b.]
c.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006	See b)(2)c.
d.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(F).
e.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(F).

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-

31-05(F) and are based on the operational restrictions contained in c)(1) which require control equipment:

i. 0.01 grain PM_{10}/dscf;

ii. 2.80 tons PM_{10}/year; and

iii. Visible PE from thebaghouse vent/stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

b. Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be compliance with the 0.01 grain PM_{10}/dscf restriction established in accordance with OAC rule 3745-31-05(F) [See b)(2)a.].

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

It should also be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-05(F) will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a), as effective December 1, 2006, do not apply to the PM_{10} emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the practically and legally enforceable voluntary restrictions established under OAC rule 3745-31-05(F) in this permit.

c) Operational Restrictions

(1) The following operational restrictions have been included in this permit for the purpose of establishing legally and practically enforceable requirements [See b)(2)a.]:

a. This emissions unit shall be vented to a baghouse control device that is capable of achieving a maximum outlet concentration of 0.01gr PM_{10}/dscf.

[OAC rule 3745-77-07(A)(1) and PTI #P0115185]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

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

c. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install #P0115185, issued on February 11, 2014. The monitoring and record keeping requirements contained in the above-referenced Permit to Install are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(3) Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the above reporting requirements are as stringent as or more stringent than the reporting requirements contained in Permit to Install #P0115185, issued on February 11, 2014. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

[OAC rule 3745-77-07(A)(3)(a)(ii)]

f) Testing Requirements

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

a. <u>Emission Limitation</u>

0.01 gr PM_{10}/dscf

<u>Applicable Compliance Method</u>

The above emission limitation represents the potential to emit (PTE) forthis emissions unit based on the continuous use of the baghouse while the emissions unit is in operation. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and in 40 CFR Part 51, Appendix M, Methods 201/201A and 202.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. <u>Emission Limitation</u>

2.80 tons PM_{10}/year

<u>Applicable Compliance Method</u>

The annual emission limitation was calculated using the following equation:

0.01 gr PM_{10} (1)	7500 dscf (2)	60 mins (3)	1 lb (3)	8760 hrs (4)	1 ton (3)
dscf	min	hour	7000 gr	year	2000 lbs

Where:

(1) Maximum outlet grain loading concentration of the baghouse, as supplied in the permit application.

(2) Maximum outlet gas flow rate of the baghouse, as supplied in the permit application.

(3) Conversion rates.

(4) Maximum annual operating schedule.

Therefore, provided compliance is shown with the 0.01 gr PM_{10}/dscf emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from thebaghouse vent/stack serving this emissions unit shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method

If required, compliance with the Visible PE limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9 of 40 CFR, Part 60, Appendix A.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

g) Miscellaneous Requirements

(1) None.

35. P231, #5 Jumbo Extruder, Plug Operation, Jumbo Hopper, Preheater

Operations, Property and/or Equipment Description:

#5 jumbo extruder, plug operation, jumbo hopper, electric preheater, and exhaust hood

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

(1) 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(F) [PTI #P0115185, issued February 11, 2014]	2.03 pounds volatile organic compounds (VOC)/hour & 8.89 tons VOC/year
b.	OAC rule 3745-21-07(M)	This emissions unit is not subject to the requirements of this rule because it does not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

(2) Additional Terms and Conditions

a. This permit establishes the following legally and practically enforceable emission limitations for this emissions unit:

i. 2.03 pounds VOC/hour; and

ii. 8.89 tons VOC/year.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the

reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. Emission Limitation

2.03 pounds VOC/hour

Applicable Compliance Method

The above emission limitation represents the potential to emit (PTE) forthis emissions unit. Therefore, no record keeping or compliance method calculations are required to demonstrate compliance with this limitation.The hourly PTE may be calculated, as follows:

1125 lbs (1)	1.8×10^{-3} lb VOC (2)
hour	lb material

Where:

(1) Maximum hourly process weight rate, as specified in the permit application.

(2) VOC emission factor, as supplied by the company in the permit application, basedon emission testing conducted on 10/24/2013 on similar emissions units.

If required, compliance with the emission limitation shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1-4 and 18, 25, or 25A.

b. Emission Limitation

8.89 tons VOC/hour

Applicable Compliance Method

The annual emission limitation was established based on the maximum annual hours of operation and can be calculated, as follows:

2.03 lbsVOC[1]	8760 hrs [2]	1 ton [3]
hr	year	2000 lbs

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

g) Miscellaneous Requirements

(1) None.

36. P237, 8 Inch Auger Extruder

Operations, Property and/or Equipment Description:

8 inch auger extruder

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-11(B)(1)	0.551 pound particulate emissions (PE)/hour
b.	OAC rule 3745-17-07(A)	Visible PE from the egress point associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

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

c. any corrective actions taken to eliminate the visible emissions.

[OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the control device and the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

a. <u>Emission Limitation</u>

0.551 pound PE/hour

<u>Applicable Compliance Method</u>

This emission limitation was established pursuant to OAC rule 3745-17-11(B) based on a maximum process weight rate of 37 pounds/hour, as provided in the permit application.

The actual particulate emission rate may be calculated, as follows:

37 pounds material [(1)]	0.005 lb PE [(2)]
hour	pound material

Where:

(1) Maximum process weight rate, as indicated in the permit application.

(2) PE emission factor, as supplied by the company in the permit application. PM_{10} is estimated to be 37% of the total PE based on lab analysis conducted on 3/22/2012.

If required, compliance with the above emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(10).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(10)]

b. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) Pursuant to OAC rule 3745-31-01, this emissions unit is not a "new source" and as such, is only subject to the requirements of the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21. For the purposes of federal enforceability, this emissions unit has the potential to emit the following pollutants that do not have any SIP requirements:

a. 7.88 tons VOC/year

1,000 lbs (1)	1.80×10^{-3} lb VOC (2)	8,760 hours (3)	1 ton (4)
hour	pound	year	2,000 lbs

Where:

(1) Maximum process weight rate, as indicated in the permit application.

(2) VOC emission factor, as supplied by the company in the permit application, based on emission testing conducted on 10/24/2013 on similar emissions units.

(3) Maximum annual operating schedule, as provided in the permit application.

(4) Conversion rate.

37. R001, Rigid Board Foiling

Operations, Property and/or Equipment Description:

rigid board foiling process – coating (primer/adhesive) and cleanup operations

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

(1) b)(1)d.; d)(8) through d)(11); and e)(3)

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.	ORC 3704.03(T) [PTI #P0110460, issued July 23, 2012]	See b)(2)a.
b.	OAC rule 3745-31-05(D), issued July 23, 2012]	55.23 tons volatile organic compounds (VOC) per rolling, 12-month period 9.90 tons per rolling, 12-month period for any individual hazardous air pollutant (HAP) 24.90 tons per rolling, 12-month period for any combination of HAPs See b)(2)b.
c.	OAC rule 3745-17-11(C)	See b)(2)c., c)(2) and c)(3), and d)(3) through d)(7).
d.	ORC 3704.03(F) and OAC rule 3745-114	See d)(8) through d)(11) and e)(3).

(2) Additional Terms and Conditions

a. The BAT requirements of ORC 3704.03(T) have been determined to be compliance with the emission limitations established pursuant to OAC rule 3745-31-05(D).

b. This permit establishes a federally enforceable emission limitation of 55.23 tons VOC per rolling, 12-month period from the coating and cleanup operations, based on a coating/cleanup usage restriction [See c)(1).] in order to maintain a minor facility designation for Prevention of Significant Deterioration (PSD)

purposes and in order to avoid Maximum Achievable Control Technology (MACT) requirements for this installation.

c. This coating operation employs both roll coat and spray coating application methods.

i. Pursuant to OAC rule 3745-17-11(C), the permittee shall operate a dry particulate filter for surface spray coating operations.

ii. Pursuant to OAC rule 3745-17-11(A)(1)(h), surface roll coating operations are exempt from the requirements of OAC rule 3745-17-11(C).

c) Operational Restrictions

(1) The maximum rolling, 12-month quantity of coatings and cleanup materials employed in this emissions unit is limited by the following equation:

$$\sum_{M=1}^{12}\sum_{i=1}^{n}[(V_i)(G_i)]\left(\frac{\text{ton}}{2000\text{ lbs}}\right) \leq 55.23\text{ tons}$$

Where,

M = the increment of the rolling, 12-month period;

V_i = VOC content, in pounds per gallon, of each coating/cleanup employed;

G_i = gallons used of each coating/cleanup material for the rolling, 12 month period; and

n = total number of unique coatings and cleanup materials employed in the emissions unit.

[OAC rule 3745-77-07(A)(1) and PTI #P0110460]

(2) The permittee shall install, operate, and maintain dry particulate filter system(s) for the surface spray coating operation(s) in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s) with any modifications deemed necessary by the permittee. The dry particulate filter(s) shall be employed during all periods of spray coating application to control particulate emissions.

[OAC rule 3745-77-07(A)(1) and PTI #P0110460]

(3) The permittee shall expeditiously repair the dry particulate filter(s) or otherwise return it to normal operations, as recommended by the manufacturer with any modifications deemed necessary by the permittee, whenever it is determined that the control device(s) is/are not operating in accordance with these requirements.

[OAC rule 3745-77-07(A)(1) and PTI #P0110460]

d) Monitoring and/or Recordkeeping Requirements

(1) In order to demonstrate compliance with the 12-month, rolling emission limitation, the permittee shall collect and record the following information each month for this emissions unit:

a. the name and identification number/code of each coating (primers and/or adhesives) and cleanup material employed;

b. the number of gallons of each coating (primers and/or adhesives) and cleanup material employed;

c. the VOC content of each coating (primers and/or adhesives) and cleanup material employed;

d. the emission rate, in pound(s), from each coating (primers and/or adhesives) and cleanup material employed [d)(1)b. times d)(1)c.];

e. the total emission rate from all coatings (primers and/or adhesives) and cleanup materials employed, in ton(s) [summation of d)(1)d. divided by 2,000 pounds/ton]; and

f. the total cumulative VOC emissions during the rolling, 12-month period [summation of VOC emissions, as recorded in d)(1)e., for the present month plus the previous 11 months of operation], in ton(s).

Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.

[OAC rule 3745-77-07(C)(1) and PTI #P0110460]

(2) The permittee shall collect and record the following information each month for all materials containing any hazardous air pollutant (HAP) that are applied in this emissions unit:

a. the name and identification number/code of each coating, thinner, additive, cleanup material, and any other material containing any HAP;

b. the name/identification of each individual HAP contained in each material applied [as identified in d)(2)a.] and the pound(s) of each HAP per gallon of each HAP-containing material applied;

c. the number of gallons of each coating, thinner, additive, cleanup material, and other material applied during the month;

d. for each individual HAP, the total emissions from all the materials employed, in ton(s) [summation of the products of d)(2)b. times d)(2)c. for all the materials applied during the month, divided by 2,000 pounds];

e. the total combined HAP emissions from all the materials employed during the month, in ton(s) [summation of all the individual HAP emissions from d)(2)d.];

f. the cumulative emissions for each individual HAP during the rolling, 12-month period, [summation of individual HAP emissions, as recorded in d)(2)d., for the present month plus the previous 11 months of operation], in ton(s); and

g. the cumulative, combined HAP emissions from all materials employed during the rolling, 12-month period [summation of combined HAP emissions, as recorded in d)(2)e., for the present month plus the previous 11 months of operation], in ton(s).

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting your Ohio EPA District Office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings and cleanup materials.

[OAC rule 3745-77-07(C)(1) and PTI #P0110460]

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for each dry 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 appropriate Ohio EPA District Office or local air agency upon request.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11(C), and PTI #P0110460]

(4) The permittee shall conduct periodic inspections of each dry particulate filter 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. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11(C), and PTI #P0110460]

(5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of each dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11(C), and PTI #P0110460]

(6) The permittee shall document each inspection (periodic and annual) of each dry particulate filter system and shall 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 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 appropriate Ohio EPA District Office or local air agency upon request.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11(C), and PTI #P0110460]

(7) The permittee shall maintain records that document any time periods when the dry particulate filter(s) was/were not in service when the emissions unit was in operation, as well as, a record of all operations during which the dry 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 Ohio EPA upon request.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11(C), and PTI #P0110460]

(8) The permit-to-install (PTI) application for this/these emissions unit(s) was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) 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(s) emitted at over one ton per year 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(s) emitted from the emissions unit(s), (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 (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (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(s), i.e., "**X**" hours per day and "**Y**" 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 Maximum Acceptable Ground-Level Concentration (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 tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: methanol

TLV (mg/m^3): 263

Maximum Hourly Emission Rate (lbs/hr): 2.56

Predicted 1-Hour Maximum Ground-Level Concentration ($\mu g/m^3$): 3,486

MAGLC ($\mu g/m^3$): 6,240

The permittee, has demonstrated that emissions of methanol, from the emissions unit(s)is/are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (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).

[PTI #P0110460]

(9) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), 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 Threshold Limit Value (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(s) or its/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 PTI 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.

[PTI #P0110460]

(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 Maximum Acceptable Ground-Level Concentration (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(s) 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(s) or the materials applied.

[PTI #P0110460]

(11) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[PTI #P0110460]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational

restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

a. The permittee shall include in the quarterly report, any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

[OAC rule 3745-77-07(C)(1), OAC rule 3745-17-11(C), and PTI #P0110460]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(C)(1) and PTI #P0110460]

(3) The permittee shall submit annual reports that include any changes to any parameter or value used in the dispersion model used to demonstrate compliance with the Toxic Air Contaminate Statute, ORC 3704.03(F), through the predicted 1 hour maximum concentration. The report should include:

a. the original model input;

b. the updated model input;

c. the reason for the change(s) to the input parameter(s);

d. a summary of the results of the updated modeling, including the input changes; and

e. a statement that the model results indicate that the 1-hour maximum ground-level concentration is less than 80% of the MAGLC.

If no changes to the emissions, emissions unit(s), or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect.

[PTI #P0110460]

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

55.23 tons VOC per rolling, 12-month period from coating and cleanup operations

Applicable Compliance Method

The annual emission limitation was established in accordance with the following equation:

$$\frac{3.24 \text{ gals}^{(1)}}{\text{hour}} \cdot \frac{14200 \text{ gals}^{(2)}}{\text{year}} \cdot \frac{1 \text{ ton}^{(3)}}{2000 \text{ lbs}} + \frac{0.16 \text{ lb VOC}^{(4)}}{\text{hour}} \cdot \frac{8760 \text{ hours}^{(3)}}{\text{year}} \cdot \frac{1 \text{ ton}^{(3)}}{2000 \text{ lbs}}$$

Where:

(1) Maximum OC content for coating (primer and adhesive), as employed.
(2) Maximum coating usage rate.
(3) Conversion factors.
(4) Potential hourly cleanup emission rate.

The permittee shall demonstrate compliance with the 12-month, rolling VOC emission limitation in accordance with the recordkeeping requirements established in d)(1).

b. Emission Limitations

9.90 tons per rolling, 12-month period for any individual HAP

24.90 tons per rolling, 12-month period for any combination of HAPs

Applicable Compliance Method

The permittee shall demonstrate compliance with the 12-month, rolling HAP emission limitations in accordance with the recordkeeping requirements established in d)(2).

[OAC rule 3745-77-07(C)(1) and PTI #P0110460]

g) Miscellaneous Requirements

(1) None.

38. Emissions Unit Group - Bread Mixers (Building #42): P207, P208, P209, P210, P211, P212 [The company operates (6) bread mixers. A maximum of (4) bread mixers can operate simultaneously.]

EU ID	Operations, Property and/or Equipment Description
P207	Bread Mixers #1: 700 pound/hour capacity
P208	Bread Mixers #2: 700 pound/hour capacity
P209	Bread Mixers #3: 501 pound/hour capacity
P210	Bread Mixers #4: 501 pound/hour capacity
P211	Bread Mixers #5: 378 pound/hour capacity
P212	Bread Mixers #6: 161 pound/hour capacity

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

(1) b)(1)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 #P0115185, issued February 11, 2014]	<u>Combined Emission Limits for P207, P208, P209, P210, P211, and P212</u>: 1.01 pounds particulate matter ≤ 10 microns in size (PM_{10})/hour; 4.42 tons PM_{10}/year 1.53 pounds volatile organic compounds/hour; 6.70 tons VOC/year See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(A)	Visible PE from the stack(s) associated with this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-21-07(M)	This emissions unit is not subject to the requirements of this rule because it does

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		not meet all of the conditions outlined in OAC rule 3745-21-07(M)(3)(a).
e.	OAC rule 3745-114 ORC 3704.03	This emissions unit is not subject to the requirements of these rules because it was installed prior to May 1, 1986.

(2) Additional Terms and Conditions

a. Based on normal operating conditions, the emission limitations reflect the simultaneous operation of (4) bread mixers (P207 through P212).

b. Best Available Technology (BAT) requirements for this emissions unit have been determined to be compliance with the emission limitations established pursuant to OAC rule 3745-31-05(A)(3) and the requirements of OAC rule 3745-17-07(A).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack(s) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

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)(1)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.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the federally and state-only enforceable emission limitations, operational restrictions, and control device operating parameter limitations, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall include (a) the probable cause of such deviations and (b) any corrective actions or preventative measures that have been or will be taken to eliminate the deviation(s).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

(2) The permittee shall submit written reports that identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements every six months, in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

a. The permittee shall include in the semiannual report, the following information concerning the visible emission checks during the operation of this emissions unit:

i. all visible emission checks during which any visible particulate emissions were observed from the stack serving this emissions unit; and

ii. any corrective actions taken to minimize or eliminate the visible particulate emissions identified in e)(2)a.i.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

f) Testing Requirements

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

a. <u>Emission Limitations</u>: Combined limits for emissions units P207 through P212

1.01 pounds PM_{10}/hour
1.53 pounds VOC/hour

<u>Applicable Compliance Method</u>

The hourly emission limitations represent the potential to emit (PTE) for these emissions units. Therefore, no record keepingor compliance method calculations are required to demonstrate compliance with these limitations. The hourly PTE may be calculated, as follows:

1740 pounds material (1)	pound pollutant (2)
hour	pound material

Where:

(1) Combined, maximum process weight rate for P207 through P212, as indicated in the permit application.

(2) Pollutant-specific emission factor, as supplied by the company in the permit application, based on stack testing conducted 10/22/2013.

PM_{10}	5.80×10^{-4} pound PM_{10}/pound material
VOC	8.81×10^{-4} pound VOC/pound material

If required, compliance with the emission limitations shall be demonstrated in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1 – 4 and Methods 18, 25, or 25A, as appropriate (VOC) and/or 40 CFR Part 51, Appendix M, Methods 201/201A and 202 (PM_{10}).

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

b. Emission Limitations: Combined limits for emissions units P207 through P212

4.42 tons PM_{10}/year
6.70 tons VOC/year

Applicable Compliance Method

The annual emission limitations were established based on the maximum annual hours of operation and can be calculated, as follows:

pound pollutant (1)	8,760 hours (2)	1 ton (3)
hour	year	2,000 pounds

Where:

(1) Established hourly emission limitation.

(2) Maximum annual operating schedule, as provided in the permit application.

(3) Conversion rate.

Therefore, provided compliance is shown with the hourly emission limitations, compliance with the annual emissions limitations shall also be demonstrated.

[OAC rule 3745-77-07(C)(1) and PTI #P0115185]

c. Emission Limitation

Visible PE from the stack(s) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

This emission limitation was established pursuant to OAC rule 3745-17-07(A). If required, compliance with the above visible emission limitation shall be determined in accordance with OAC rule 3745-17-03(B)(1).

[OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-03(B)(1)]

g) Miscellaneous Requirements

(1) None.