



09/28/2026

John Randolph
Materion Brush Inc.
14710 W Portage River South Road
Elmore, OH 43416

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL

Facility ID: 0362000009
Permit Number: P0141425
Permit Type: Initial Installation
County: Ottawa

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
Yes	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency (Ohio EPA) [Weekly Review and Public Notices](#) website. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Ohio EPA document search webpage: [eDocument Search](#). 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:

Andrea Moore
Permitting 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 Rd.
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 on the Ohio EPA [Weekly Review and Public Notices](#) website. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

Robert Hodanbosi
Chief, Division of Air Pollution Control

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

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: [Weekly Review and Public Notices | Ohio Environmental Protection Agency](#) or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-3037 email: HClerk@epa.ohio.gov

Draft Air Pollution Permit-to-Install Initial Installation

Materion Brush Inc.

14710 W. Portage River South Road

1/4 mile east of SR 590

Elmore, OH 43416-9502

ID#: P0141425

Date of Action: 09/28/2026

Permit Desc: Initial installation of decomposition furnace #4 which is being added to emission unit Group K - Pebble Plant.

The permit can be accessed electronically and comments may be submitted at: <https://ohioepa.commentinput.com> - Search by entering the permit P0141425 in the "Search Projects" search box.

Permit Strategy Write-Up

1. Check all that apply:

☒ Synthetic Minor Determination

☐ Netting Determination

2. Source Description:

Materion Brush intends to install a fourth decomposition furnace No. 4, emissions unit P173, which will be part of emissions unit Group K: Pebble Plant – 6 Furnaces and Wet Plant. The other emissions units in this group are not being modified, P114 – Decomposition Furnace No. 2; P115 – Decomposition Furnace No. 3; P116 – Reduction Furnace No. 1; P117 – Reduction Furnace No. 2; P118 – Wet Plant – Pebble Plant; and P122 – Decomposition Furnace No. 1. The addition of emissions unit P173 is only being done to allow greater flexibility in production scheduling of furnaces, with no increase for potential to emit or allowable emissions for any pollutants for this emissions unit Group K.

3. Facility Emissions and Attainment Status:

Materion Brush is a major facility for Prevention of Significant Deterioration (PSD) and Title V purposes. Materion Brush is an area source with respect to hazardous air pollutant (HAP) emissions, including beryllium, and complies with the beryllium NESHAP [40 CFR 61.32(b)] by conducting ambient air monitoring for beryllium. Ottawa County is in attainment for all criteria pollutants.

4. Source Emissions:

Federally enforceable emissions limitations for PE/PM₁₀/PM_{2.5} are being established to avoid the requirements of PSD permitting. The federally enforceable limitations are based on operational restrictions that require the use of a wet electrostatic precipitator achieving a design overall control efficiency of 80 percent for PE/PM₁₀/PM_{2.5}, beryllium and fluoride compounds; and 90 percent for hydrogen cyanide. All emissions in the table below are in tons per year (tpy):

Emissions Unit ID	PE	PM ₁₀	PM _{2.5}	Be*	Fluoride Compounds**	HCN***	SO ₂	NO _x	VOC	CO	Lead
P114-P118, P122 and P173, combined	1.87	1.87	1.87	0.0368	2.20	4.38	0	0	0	0	0
Total Project Emissions (tpy)	1.87	1.87	1.87	0.0368	2.20	4.38	0	0	0	0	0
PSD Significance Level (tpy)	25	15	10	N/A**	N/A**	N/A**	40	40	40	100	0.6

*Be = beryllium; **fluoride compounds as hydrogen fluoride; ***HCN = hydrogen cyanide; N/A = not applicable

5. Conclusion:

Federally enforceable limitations are being established for PM10/PM2.5 and Be emissions from emissions units P114-P118, P122 and P173, combined, so that the company does not trigger the significance levels for PSD permitting.

6. Please provide additional notes or comments as necessary:

None

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM10/PM2.5	1.87
Be	0.0368
Fluoride Compounds	2.20
HCN	4.38



**Environmental
Protection
Agency**

DRAFT

Division of Air Pollution Control

Permit-to-Install

for

Materion Brush Inc.

Facility ID:	0362000009
Permit Number:	P0141425
Permit Type:	Initial Installation
Issued:	09/28/2026
Effective:	To be entered upon final issuance

Division of Air Pollution Control

Permit-to-Install

for

Materion Brush Inc.

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Authorization

Facility ID: 0362000009
Facility Description: Copper Rolling and Drawing
Application Number(s): A0082628
Permit Number: P0141425
Permit Type: Permit-To-Install
Permit Fee: \$300.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 09/28/2026
Effective Date: To be entered upon final issuance

This document constitutes issuance of a Permit-to-Install for the emissions unit(s) identified on the following page to:

Materion Brush Inc.
14710 W. Portage River South Road
1/4 mile east of SR 590
Elmore, OH 43416-9502

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 Rd.
Bowling Green, OH 43402
(419)352-8461

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

John Logue
Director

Authorization (continued)

Permit Number: P0141425

Permit Description: Initial installation of decomposition furnace #4 which is being added to emission unit Group K - Pebble Plant.

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

Group Name: Group K: Pebble Plant

Emissions Unit ID:	P114
Company Equipment ID:	Decomp. FCE No. 2
Superseded Permit Number:	P0129327
General Permit Category and Type:	Not Applicable P0129327
Emissions Unit ID:	P115
Company Equipment ID:	Decomp. FCE No. 3
Superseded Permit Number:	P0129327
General Permit Category and Type:	Not Applicable P0129327
Emissions Unit ID:	P116
Company Equipment ID:	Reduction FCE No.1
Superseded Permit Number:	P0129327
General Permit Category and Type:	Not Applicable P0129327
Emissions Unit ID:	P117
Company Equipment ID:	Reduction FCE No. 2
Superseded Permit Number:	P0129327
General Permit Category and Type:	Not Applicable P0129327
Emissions Unit ID:	P118
Company Equipment ID:	Wet Plant
Superseded Permit Number:	P0129327
General Permit Category and Type:	Not Applicable P0129327
Emissions Unit ID:	P122
Company Equipment ID:	Decomp. FCE No. 1
Superseded Permit Number:	P0129327
General Permit Category and Type:	Not Applicable P0129327
Emissions Unit ID:	P173
Company Equipment ID:	Decomposition Furnace #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	HVLP = high volume, low pressure	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	LAER = lowest achievable emission rate	PM = particulate matter
BACT = Best Available Control Technology	lb(s)/hr = pound(s) per hour	PM ₁₀ = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	LDAR = leak detection and repair	PM _{2.5} = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act	LPG = liquefied petroleum gas/propane	ppb = parts per billion
CAM = compliance assurance monitoring	MACT = maximum achievable control technology	ppm = parts per million
CEMS = continuous emissions monitoring system	MAGLC = maximum acceptable ground level concentration	PSD = Prevention of Significant Deterioration
CFC = chlorofluorocarbon	mg/m ³ = milligrams per cubic meter	psi = pounds per square inch
CFR = Code of Federal Regulations	MM = million	psia = pounds per square inch absolute
CH ₄ = methane	MMBtu = million British Thermal Units	PTE = potential-to-emit
CI = compression ignition	MSDS = material safety data sheet	PTI = Permit-to-Install
CO = carbon monoxide	MSW = municipal solid waste	PTIO = Permit-to-Install and Operate
CO ₂ = carbon dioxide	NAAQS = National Ambient Air Quality Standard	PTO = Permit-to-Operate
COM = continuous opacity monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	PWR = process weight rate
DAPC = Division of Air Pollution Control	NG = natural gas	RACM = reasonably available control measures
DO/LAA = District Office/Local Air Agency	ng/m ³ = nanograms per cubic meter	RACT = reasonably available control technology
dscf = dry standard cubic foot	NH ₃ = ammonia	RATA = relative accuracy test audit
EAC = emissions activity category	NMHC = non-methane hydrocarbons	RTO = regenerative thermal oxidizer
eDocs = electronic documents database	NMOC = non-methane organic compound	SB265 = Senate Bill 265
ERAC = Environmental Review Appeals Commission	NO = nitrogen oxide	scfm = standard cubic feet per minute
ESP = electrostatic precipitator	NO ₂ = nitrogen dioxide	SI = spark ignition
EU = emissions unit	NO _x = nitrogen oxides	SIP = State Implementation Plan
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NSPS = New Source Performance Standard	SO ₂ = sulfur dioxide
FER = Fee Emissions Report	NSR = New Source Review	SSMP = startup, shutdown, and malfunction plan
FR = Federal Register	NTV = Non-Title V	TDS = total dissolved solids
GACT = generally achievable control technology	O&M = operation and maintenance	TLV = threshold limit value
GHG = greenhouse gases	OAC = Ohio Administrative Code	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OC = organic compound	TPH = ton(s) per hour
H ₂ S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H ₂ SO ₄ = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible particulate emissions
HCl = hydrogen chloride	PBR = Permit-By-Rule	VMT = vehicle miles traveled
HF = hydrogen fluoride	PCB = polychlorinated biphenyl	VOC = volatile organic compound
Hg = mercury	PE = particulate emissions	WPP = work practice plan
hp = horsepower	PEMS = predictive emissions monitoring system	µg/m ³ = micrograms per cubic meter

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.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e), General Requirements
 - (3) Standard Term and Condition A.6.c), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) 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.
- b) All terms and conditions designated in parts B. and C. of this permit are federally enforceable as a practical matter, if they 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 and the state and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under state law only, only if specifically identified in this permit as such.

3. 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 re-issuance, or modification.
- 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 permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. 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 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.

4. 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, 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.
- 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, 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.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.
 - (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written 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. See A.15. below if no deviations occurred during the quarter.



- (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semiannual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. 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 are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) 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 of an 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 appropriate Ohio EPA District Office or contracted local air agency, 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 electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, 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 ORC section 3704.08.
 - (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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio 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 (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will



be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. 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.)

10. Applicability

This permit-to-install is applicable only to the emissions unit(s) identified in the permit-to-install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a permit-to-install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended once by twelve months if application is made to the Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.
- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized 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 authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a



subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shut down emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or any other reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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.

16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

19. 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.

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. The ambient concentration of beryllium (Be) in the vicinity of the facility shall not exceed 0.01 microgram (μg)/cubic meter, averaged over a 30 day period, as specified in the National Emissions Standard for Hazardous Air Pollutants, 40 CFR 61.32 (b). The permittee shall maintain and operate all beryllium emitting emissions units subject to the beryllium NESHAP, including associated equipment for air pollution control, in a manner consistent with good air pollution control practice for minimizing emissions, and shall maintain compliance with the above standard.

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group - Group K: Pebble Plant: 6 Furnaces & Wet Plant: P114, P115, P116, P117, P118, P122, P173

EU ID	Operations, Property and/or Equipment Description
P114	Decomposition Furnace No. 2
P115	Decomposition Furnace No. 3
P116	Reduction Furnace No. 1
P117	Reduction Furnace No. 2
P118	Wet Plant - Pebble Plant
P122	Decomposition Furnace No. 1
P173	Decomposition Furnace No. 4

- 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)g., d)(5) through d)(8) 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(D)	<u>The following limitations apply to emission units P114, P115, P116, P117, P118, P122 and P173, combined:</u> Emissions of beryllium (Be) shall not exceed 0.0084 lb/hr and 0.0368 ton/yr. Emissions of Fluoride compounds shall not exceed 0.5 lb/hr and 2.2 tons/yr. Emissions of Hydrogen Cyanide (HCN) shall not exceed 1.0 lb/hr and 4.38 tons/yr.

		Emissions of PM₁₀/PM_{2.5} shall not exceed 0.426 lb/hr and 1.87 tons/yr. Visible PE shall not exceed 5% opacity, as a six-minute average, from the wet electrostatic precipitator serving these emission units. See b)(2)a. through b)(2)c. and c)(1).
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM ₁₀ and PM _{2.5} emissions from these air contaminant sources since the PTE is less than 10 tons/year for each pollutant taking into account the federally enforceable restrictions in c)(1) below.
c.	OAC rule 3745-17-11(B)	See b)(2)d.
d.	OAC rule 3745-17-07(A)	See b)(2)e.
e.	40 CFR 61.32(b) [In accordance with 40 CFR 61.30, these emissions units are located at a beryllium processing facility and have the potential to emit beryllium.]	See B.2. – Facility Wide Terms and Conditions
f.	40 CFR, Part 63, Subpart GGGGGG	See b)(2)f. and b)(2)g.
g.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(5) through d)(8) and e)(2).

(2) Additional Terms and Conditions

- a. The combined emission limitations include emissions from the four decomposition furnaces (P114, P115, P122 and P173), two reduction furnaces (P116 and P117), and the concentrated fluoride operations of P118. These sources are all controlled by the same wet electrostatic precipitator (ESP). It should be noted that HCN is only emitted from emission units P114, P115, P122 and P173.
- b. The federally enforceable emission limitations in b)(1)a. were established for the purpose of limiting PTE to avoid PSD requirements. The federally enforceable emission limitations are based on the operational restrictions contained in c)(1) which require control equipment.
- c. All emissions of particulate matter from the wet ESP are PM₁₀/PM_{2.5} and include Be and Fluoride compounds.
- d. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D). This determination is based on all emissions of particulate matter being PM₁₀/PM_{2.5} and the established PM₁₀/PM_{2.5} limitation being more restrictive than particulate emissions limitation established by

OAC rule 3745-17-11(B). Particulate emissions (PE) measured using Method 5 of 40 CFR, Part 60, Appendix A would be equivalent to the filterable particulates measured using Method 201/201A of 40 CFR, Part 51, Appendix M. A $PM_{10}/PM_{2.5}$ limitation is more stringent due to the inclusion of condensable particulate matter measured by Method 202 of 40 CFR, Part 51, Appendix M.

- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- f. In accordance with 40 CFR 63.11165 the standards and compliance requirements for Primary Beryllium Production Facilities is compliance with the requirements of 40 CFR 61.32 through 40 CFR 61.34 of the National Emission Standards for Beryllium (See term 2 of section B. – Facility Wide Terms and Conditions).
- g. The permittee shall comply with "General Provision" requirements as indicated in 40 CFR 63.11166.

c) **Operational Restrictions**

- (1) The following operational restriction has been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [see b)(2)a. and b)(2)b.):

- a. use of a wet ESP to control emissions from P114, P115, P116, P117, P122, P173, and the concentrated fluoride operations of P118.
- b. the wet ESP shall achieve the following control efficiencies and an associated 5% opacity, as a six-minute average:
 - i. 80% control efficiency for Be;
 - ii. 80% control efficiency for fluoride compounds;
 - iii. 95% control efficiency for HCN; and
 - iv. 80% control efficiency for $PM_{10}/PM_{2.5}$ **

**All particulate matter emissions are $PM_{10}/PM_{2.5}$ and include Be and Fluoride compounds.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the secondary voltage, in kilovolts, and the current, in milliamperes, for each of the fields within the wet ESP during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
- a. The permittee shall record the voltage and current within a field in the wet ESP on a continuous basis.
 - b. Whenever the monitored value for the voltage and/or current with a field in the wet ESP falls below the acceptable 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 names 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 within the acceptable 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 corrective action was not necessary:
 - (a) the reasons 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, and
 - (e) the names 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. Acceptable ESP operating parameters
- The acceptable secondary voltage and current for the field of the wet ESP shall not be less than **29** kilovolts and **130** milliamps, respectively as a one-minute average, except as for times of start-up, which includes normal wet ESP cleaning cycles. During start-up, including normal wet ESP cleaning cycles, the acceptable secondary voltage and current for each field of the wet ESP shall not be less than **29** kilovolts for more than 3 minutes and not less than **130** milliamps for more than ten minutes. Sensors shall be installed to continuously measure and record the secondary voltage and secondary amperage to the precipitator collection plates.
- e. These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, Northwest District Office



(NWDO). The permittee may request revisions to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the secondary voltage, in kilovolts, and the current, in milliamps, for each of the fields within the wet ESP during operation of this emissions unit. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the voltage and current within a field in the wet ESP on a continuous basis.
- (3) Whenever the monitored value for the voltage and/or current with a field in the wet ESP falls below the acceptable value, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.
- (4) 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, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, and 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.

These ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA, NWDO. The permittee may request revisions to the ranges based upon information obtained during future emission tests that demonstrate compliance with the allowable emission rates for this emissions unit. In addition, approved revisions to the ranges will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (5) The permit-to-install (PTI) application for emissions units P114 through P118, P122 and P173 was evaluated based on the actual materials and the design parameters of the emissions units' exhaust system, as specified by the permittee. The *Toxic Air Contaminant Statute*, ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant emitted using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the MAGLC,



calculated as described in 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 eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the emissions units (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from the American Conference of Governmental Industrial Hygienists “Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices” and in the following order of preference:

- i. TLV shall be used, if the chemical is listed; or
- ii. Short-term exposure limit (STEL) or the ceiling value; the STEL is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-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 adjusted to account for the duration of the exposure or the operating hours of the emissions units, that is, X hours per day and Y days per week, from that of eight hours per day and five days per week.

- d. The resulting calculation shall be used to determine the MAGLC:

$$\frac{TLV}{10} \times \frac{8}{X} \times \frac{5}{Y} = 4 \frac{TLV}{XY} = MAGLC$$

- e. 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: Hydrogen Cyanide

TLV (mg/m³): 3.83 (From ACGIH’s “2026 TLVs and BEIs” Book)

Maximum Hourly Emission Rate (lb/hr): 1.0

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m³): 16.81

MAGLC (µg/m³): 91.0

The permittee, having demonstrated that emissions of hydrogen cyanide, from emissions units P114 through P118, P122 and P173, are estimated to be equal to or greater than 80%, but less than 100% of the MAGLC, shall not operate the emissions units 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).

- f. Toxic Contaminant: Hydrogen Fluoride

TLV (mg/m³): 0.41 (From ACGIH’s “2026 TLVs and BEIs” Book)

Maximum Hourly Emission Rate (lb/hr): 0.5



Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 8.4

MAGLC ($\mu\text{g}/\text{m}^3$): 9.76

The permittee, having demonstrated that emissions of hydrogen fluoride, from emissions units P114 through P118, P122 and P173, is estimated to be equal or greater than 80%, but less than 100% of the MAGLC, shall not operate the emissions units 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).

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

If the permittee determines that the *Toxic Air Contaminant Statute* will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a *modification* under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a *modification*, the permittee shall apply for and obtain a final 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.

- (7) 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 (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).

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- b. The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).
 - c. A copy of the computer model run(s), that established the predicted one-hour maximum ground-level concentration that demonstrated the emissions units to be in compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions.
 - 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 units or the materials applied.
 - (8) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-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.
- e) Reporting Requirements
 - (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. for each field of the wet ESP, each period of time when the field was not operating within the acceptable ranges for voltage and current;
 - b. an identification of each incident of deviation described in e)(1)a. where a prompt investigation was not conducted;
 - c. an identification of each incident of deviation described in e)(1)a. where prompt corrective action was determined to be necessary and was not taken; and
 - d. an identification of each incident of deviation described in e)(1)a. where proper records were not maintained for the investigation and/or the corrective action.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.
 - (2) The permittee shall submit quarterly reports to the Ohio EPA, NWDO, documenting any changes made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. If no changes to the emissions, emissions units or the exhaust stack have been made, then the report shall include a statement to this effect. 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 quarter.
- 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. Emissions Limitations

Combined emission limitations for emission units P114 – P117, P122, P173, and the concentrated fluoride operations of P118:

0.0084 lb Be/hr, 0.0368 ton/yr

0.5 lb Fluoride compounds/hr, 2.2 tons/yr

1.0 lb HCN/hr, 4.38 tons/yr

0.426 lb PM₁₀/PM_{2.5}/hr, 1.87 tons/yr

Applicable Compliance Method

Compliance with the combined lb/hr emission limitations shall be demonstrated by emissions testing, in term f)(2).

The combined ton/year limitations were established by multiplying the lbs per hour limitations by 8,760 hours per year, and applying a conversion factor of 1 ton/2,000 lbs. Therefore, provided compliance is shown with the hourly limitations, compliance with the annual limitations shall be demonstrated.

b. Emissions Limitation

Visible PE shall not exceed 5% opacity, as a six-minute average from the wet ESP stack serving these emission units.

Applicable Compliance Method

If required, compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources."

(2) The permittee shall conduct, or have conducted, emissions testing for these EUs in accordance with 40 CFR, Part 60 and the following requirements:

- a. The emissions testing shall be conducted within three month after start-up of EU P173.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable hourly mass emission rates for Be, Fluoride compounds, HCN and PM₁₀/PM_{2.5}. During the emissions testing, each EU P114, P115, P116, P117, P118, P122 and P173 shall be in operation.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emissions rate(s):
 - i. Method 1 through 4 of 40 CFR, Part 60, Appendix A;
 - ii. Method 29 or 104 of 40 CFR, Part 60, Appendix A for Be;
 - iii. Method 13 of 40 CFR, Part 60, Appendix A for Fluoride compounds;
 - iv. Other Test Method 29 for HCN; and
 - v. Method 201/201A and 202 of 40 CFR, Part 51, Appendix M for PM₁₀/PM_{2.5}.



Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

- d. The capture efficiency of the wet ESP shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency per U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. Ohio EPA will consider the request, including an evaluation of the applicability, necessity and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.
- e. The control efficiency of the wet ESP (that is, the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined per the test methods and procedures specified in OAC rule 3745-21-10 or an alternative test protocol approved by Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and the total concentration, and on a consideration of the potential presence of interfering gases.
- f. During the emissions testing, the EUs shall be operated under operational conditions approved in advance by the Ohio EPA, NWDO. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under worst case conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EUs operational conditions they will meet during the emissions testing and describe why they believe worst case operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the Ohio EPA, NWDO that the proposed operating conditions constitute worst case. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the Ohio EPA, NWDO. The ITT notification shall describe in detail the proposed test methods and procedures, the EUs 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 NWDO's refusal to accept the results of the emission test(s).
- h. Personnel from the Ohio EPA, NWDO 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 EUs and the testing procedures provide a valid characterization of the emissions from the EUs and/or the performance of the control equipment.
- i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the Ohio EPA, NWDO 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 Ohio EPA, NWDO.

g) Miscellaneous Requirements

(1) None.