State of Ohio Environmental Protection Agency

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Columbus, Ohio 43215

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MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

9/24/2009

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Clete Hoersten
Joint Systems Manufacturing Center
1161 Buckeye Road
Lima, OH 45804-1825

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0302020027
Permit Number: P0104852
Permit Type: Initial Installation
County: Allen

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

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 DAPC, Northwest District Office

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Joint Systems Manufacturing Center

Facility ID:	0302020027
Permit Number:	P0104852
Permit Type:	Initial Installation
Issued:	9/24/2009
Effective:	9/24/2009

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Joint Systems Manufacturing Center

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Authorization

Facility ID: 0302020027
Facility Description: Tanks and Tank Components
Application Number(s): A0037170
Permit Number: P0104852
Permit Description: Machining and welding improvement project involving the installation of a new air arcing unit and a new de-milling operation. Improvement project also involves the modification of three existing air arcing units.
Permit Type: Initial Installation
Permit Fee: $1,000.00
Issue Date: 9/24/2009
Effective Date: 9/24/2009

This document constitutes issuance to:

Joint Systems Manufacturing Center
1155 Buckeye Road
Lima, OH 45804-1825

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

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

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

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants 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

Chris Korleski
Director

Authorization (continued)

Permit Number: P0104852
Permit Description: Machining and welding improvement project involving the installation of a new air arcing unit and a new de-milling operation. Improvement project also involves the modification of three existing air arcing units.

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

Emissions Unit ID:	**P036**
Company Equipment ID:	Air Arcing Unit AC3A
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P037**
Company Equipment ID:	Air Arcing Unit AC3B
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P038**
Company Equipment ID:	Air Arcing Unit AC4A
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P039**
Company Equipment ID:	Air Arcing Unit AC4B
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P040**
Company Equipment ID:	De-Milling Operation
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

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) and A. 6.d), 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 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) The permittee must comply with all terms and conditions of this permit. 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 (i.e., postmarked) 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 (i.e., postmarked) 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 semi-annual 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) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) 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.

c) 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.

d) 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

(i.e., postmarked) 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).

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 by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party 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 through completion of the annual PER covering the last period of operation 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 shutdown 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 PER covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a PER, air fee emission report, or other any 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 (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online 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 (i.e., postmarked), 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 Ohio EPA DAPC, Northwest District Office must be notified in writing of any transfer of this permit.

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.

C. Emissions Unit Terms and Conditions

1. P036, Air Arcing Unit AC-3A

Operations, Property and/or Equipment Description:

Air Arcing Unit

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 operations(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. 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)	Filterable particulate matter equal to or less than 10 microns in size (PM_{10}) shall not exceed 0.002 grain per dry standard cubic foot (dscf) and 0.60 ton per year for emissions units P036, P037 and P040, combined. Visible stack particulate emissions (PE) shall not exceed 0% opacity, as a six-minute average [see b)(2)a.ii.] No visible fugitive particulate emissions from the building containing this emissions unit [see b)(2)a.iii. and iv.] 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 voluntary restrictions established in this permit.
c.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to voluntary restrictions established in this permit.

(2) Additional Terms and Conditions

a. This permit to install (PTI) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for particulate matter less than or equal to 10 microns in size (PM_{10}) from emission units P036, P037, and P040, combined:

i. use of a control system consisting of multiple air filtration units as described below:

(a) a 20,000 acfm cartridge filter (FC-3A) shall be dedicated to solely control emissions unit P036. The exhaust from cartridge filter FC-3A shall exhaust into "Block 3" of Building 351. "Block 3" of Building 351 contains emissions unit P036 as well as emission units P037 and P040;

(b) a portion of the air within "Block 3" of Building 351 shall be re-circulated through an approximately 15,000 acfm HEPA filter. The exhaust from the HEPA filter exhausts into "Block 3" of Building 351;

(c) air will exit "Block 3" of Building 351 by being vented to an 8,000 acfm HEPA filter (HEPA-351-3) achieving a maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf;

ii. a visible emission restriction (associated with the air filtration control system) not to exceed 0% opacity, as a 6-minute average from the HEPA filter (HEPA-351-3) stack controlling air exiting "Block 3" of Building 351;

iii. the stack for HEPA filter (HEPA-351-3) shall be the only point of egress for emissions from "Block 3" of Building 351 (i.e. all doors, windows, roof vents, etc. shall remain closed during all times of operation).

iv. a visible emission restriction (associated with the egress requirement in iii. above) of no visible fugitive particulate emissions from "Block 3" of Building 351.

The potential to emit (PTE) for emissions units P036, P037, and P040, combined is 0.60 ton filterable PM_{10}/year. The annual PTE was determined by multiplying the maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf by a maximum volumetric air flow of 8,000 acfm, applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1acfm, and 60 minutes/hr and multiplying the maximum operating schedule of 8760 hrs/yr, and then dividing by 2000 lbs/ton. It should be noted that all emissions of particulate matter are PM_{10}.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be controlled in accordance with the air filtration requirements specified in this permit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain, equipment to continuously monitor the pressure drop, in inches of water, across HEPA filter (HEPA-351-3) 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 pressure drop across HEPA filter (HEPA-351-3) on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, 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.

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. 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, the pressure drop readings immediately after the corrective action, 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.

The acceptable range for the pressure drop across HEPA filter (HEPA-351-3) is 0.5 to 3 inches of water.

This range 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 based upon information obtained during future particulate emissions tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range 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 perform daily checks, when emissions unit P036, P037, and/or P040 is/are in operation, for any visible fugitive particulate emissions from “Block 3” of Building 351. 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 location and color of the emissions;

b. the total duration of any visible emission incident; and any corrective actions taken to eliminate the visible emissions.

The permittee shall also perform daily checks of "Block 3" of Building 351 to ensure all doors, windows, roof vents, etc. are closed as required by b)(2)a.iii.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across HEPA filter (HEPA-351-3) was outside of the acceptable range specified by this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not controlled in accordance with the air filtration system specified by this permit;

c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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 semiannual written reports that identify all days during which any visible fugitive particulate emissions were observed from "Block 3" of Building 351 and describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>
0.002 grain filterable PM_{10}/dscf

<u>Applicable Compliance Method</u>:

The filterable gr/dscf limitation was established in accordance with a rated outlet concentration for the HEPA filter of the manufacturer's guaranteed fabric filter grain loading. If required, the permittee shall demonstrate compliance with the filterable gr PM10/dscf by testing in accordance with Methods 201/201A of 40

CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:
0.60 ton filterable PM_{10}/year

Applicable Compliance Method:

The annual limitation was established by multiplying the maximum outlet concentration of 0.002 gr filterable PM_{10}/dscf and the maximum volumetric air flow rate (8,000 acfm) of HEPA filter (HEPA-351-3) and using the following conversion factors in order to covert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 lbs. Therefore, provided compliance is demonstrated with the 0.002 gr filterable PM_{10}/dscf limitation, compliance with the annual limitation will be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

c. Emission Limitation:
Visible stack particulate emissions shall not exceed 0% opacity, as a 6-minute average except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9.

d. Emission Limitation:

No visible fugitive particulate emissions from the building containing this emissions unit.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

g) Miscellaneous Requirements

(1) None.

2. P037, Air Arcing Unit AC-3B

Operations, Property and/or Equipment Description:

Air Arcing Unit

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 operations(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. 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)	Filterable particulate matter equal to or less than 10 microns in size (PM_{10}) shall not exceed 0.002 grain per dry standard cubic foot (dscf) and 0.60 ton per year for emissions units P036, P037 and P040. combined. Visible stack particulate emissions (PE) shall not exceed 0% opacity, as a six-minute average [see b)(2)a.ii.] No visible fugitive particulate emissions from the building containing this emissions unit [see b)(2)a.iii. and iv.] 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 voluntary restrictions established in this permit.
c.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to voluntary restrictions established in this permit.

(2) Additional Terms and Conditions

a. This permit to install (PTI) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for particulate matter less than or equal to 10 microns in size (PM_{10}) from emission units P036, P037, and P040, combined:

i. use of a control system consisting of multiple air filtration units as described below:

(a) a 20,000 acfm cartridge filter (FC-3B) shall be dedicated to solely control emissions unit P037. The exhaust from cartridge filter FC-3B shall exhaust into "Block 3" of Building 351. "Block 3" of Building 351 contains emissions unit P037 as well as emission units P036 and P040;

(b) a portion of the air within "Block 3" of Building 351 shall be re-circulated through an approximately 15,000 acfm HEPA filter. The exhaust from the HEPA filter exhausts into "Block 3" of Building 351;

(c) air will exit "Block 3" of Building 351 by being vented to an 8,000 acfm HEPA filter (HEPA-351-3) achieving a maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf;

ii. a visible emission restriction (associated with the air filtration control system) not to exceed 0% opacity as a 6-minute average from the HEPA filter (HEPA-351-3) stack controlling air exiting "Block 3" of Building 351;

iii. the stack for HEPA filter (HEPA-351-3) shall be the only point of egress for emissions from "Block 3" of Building 351 (i.e. all doors, windows, roof vents, etc. shall remain closed during all times of operation).

iv. a visible emission restriction (associated with the egress requirement in iii. above) of no visible fugitive particulate emissions from "Block 3" of Building 351.

The potential to emit (PTE) for emission units P036, P037, and P040, combined, is 0.60 ton filterable PM_{10}/year. The annual PTE was determined by multiplying the maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf by a maximum volumetric air flow of 8,000 acfm, applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1acfm, and 60 minutes/hr and multiplying the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. It should be noted that all emissions of particulate matter are PM_{10}.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be controlled in accordance with the air filtration requirements specified in this permit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain, equipment to continuously monitor the pressure drop, in inches of water, across HEPA filter (HEPA-351-3) 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 pressure drop across HEPA filter (HEPA-351-3) on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, 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.

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. 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, the pressure drop readings immediately after the corrective action, 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.

The acceptable range for the pressure drop across HEPA filter (HEPA-351-3) is 0.5 to 3 inches of water.

This range 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 based upon information obtained during future particulate emissions tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range 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 perform daily checks, when emissions unit P036, P037, and/or P040 is/are in operation, for any visible fugitive particulate emissions from “Block 3” of Building 351. 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 location and color of the emissions;

b. the total duration of any visible emission incident; and any corrective actions taken to eliminate the visible emissions.

The permittee shall also perform daily checks of "Block 3" of Building 351 to ensure all doors, windows, roof vents, etc. are closed as required by b)(2)a.iii.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across HEPA filter (HEPA-351-3) was outside of the acceptable range specified by this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not controlled in accordance with the air filtration system specified by this permit;

c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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 semiannual written reports that identify all days during which any visible fugitive particulate emissions were observed from "Block 3" of Building 351 and describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>
0.002 grain filterable PM_{10}/dscf

<u>Applicable Compliance Method</u>:

The filterable gr/dscf limitation was established in accordance with a rated outlet concentration for the HEPA filter of the manufacturer's guaranteed fabric filter grain loading. If required, the permittee shall demonstrate compliance with the filterable gr PM10/dscf by testing in accordance with Methods 201/201A of 40

CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:
0.60 ton filterable PM_{10}/year

Applicable Compliance Method:

The annual limitation was established by multiplying the maximum outlet concentration of 0.002 gr filterable PM_{10}/dscf and the maximum volumetric air flow rate (8,000 acfm) of HEPA filter (HEPA-351-3) and using the following conversion factors in order to covert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 lbs. Therefore, provided compliance is demonstrated with the 0.002 gr filterable PM_{10}/dscf limitation, compliance with the annual limitation will be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

c. Emission Limitation:
Visible stack particulate emissions shall not exceed 0% opacity, as a 6-minute average except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9.

d. Emission Limitation:

No visible fugitive particulate emissions from the building containing this emissions unit.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

g) Miscellaneous Requirements

(1) None.

3. P038, Air Arcing Unit AC4A

Operations, Property and/or Equipment Description:

Air Arcing Unit AC4A

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 operations(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. 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)	Filterable particulate matter equal to or less than 10 microns in size (PM_{10}) shall not exceed 0.002 grain per dry standard cubic foot (dscf) and 0.60 ton per year for emissions units P038 and P039, combined. Visible stack particulate emissions (PE) shall not exceed 0% opacity, as a six-minute average [see b)(2)a.ii.] No visible fugitive particulate emissions from the building containing this emissions unit [see b)(2)a.iii. and iv.] 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 voluntary restrictions established in this permit.
c.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to voluntary restrictions established in this permit.

(2) Additional Terms and Conditions

a. This permit to install (PTI) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for particulate matter less than or equal to 10 microns in size (PM_{10}) from emission units P038, P039, combined:

i. use of a control system consisting of multiple air filtration units as described below:

(a) a 20,000 acfm cartridge filter (FC-4A) shall be dedicated to solely control emissions unit P038. The exhaust from cartridge filter FC-4A shall exhaust into "Block 4" of Building 351. "Block 4" of Building 351 contains emissions unit P038 as well as emission unit P039;

(b) a portion of the air within "Block 4" of Building 351 shall be re-circulated through an approximately 15,000 acfm HEPA filter. The exhaust from the HEPA filter exhausts into "Block 4" of Building 351;

(c) air will exit "Block 4" of Building 351 by being vented to an 8,000 acfm HEPA filter (HEPA-351-4) achieving a maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf;

ii. a visible emission restriction (associated with the air filtration control system) not to exceed 0% opacity as a 6-minute average from the HEPA filter (HEPA-351-4) stack controlling air exiting "Block 4" of Building 351;

iii. the stack for HEPA filter (HEPA-351-4) shall be the only point of egress for emissions from "Block 4" of Building 351 (i.e. all doors, windows, roof vents, etc. shall remain closed during all times of operation).

iv. a visible emission restriction (associated with the egress requirement in iii. above) of no visible fugitive particulate emissions from "Block 4" of Building 351.

The potential to emit (PTE) for emission units P038 and P039 combined is 0.60 ton filterable PM_{10}/year. The annual PTE was determined by multiplying the maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf by a maximum volumetric air flow of 8,000 acfm, applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1acfm, and 60 minutes/hr and multiplying the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. It should be noted that all emissions of particulate matter are PM_{10}.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be controlled in accordance with the air filtration requirements specified in this permit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain, equipment to continuously monitor the pressure drop, in inches of water, across HEPA filter (HEPA-351-4) 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 pressure drop across HEPA filter (HEPA-351-4) on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, 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.

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. 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, the pressure drop readings immediately after the corrective action, 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.

The acceptable range for the pressure drop across HEPA filter (HEPA-351-4) is 0.5 to 3 inches of water.

This range 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 based upon information obtained during future particulate emissions tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range 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 perform daily checks, when emissions unit P038 and/or P039 is/are in operation, for any visible fugitive particulate emissions from “Block 4” of Building 351. 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 location and color of the emissions;

b. the total duration of any visible emission incident; and any corrective actions taken to eliminate the visible emissions.

The permittee shall also perform daily checks of "Block 4" of Building 351 to ensure all doors, windows, roof vents, etc. are closed as required by b)(2)a.iii.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across HEPA filter (HEPA-351-4) was outside of the acceptable range specified by this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not controlled in accordance with the air filtration system specified by this permit;

c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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 semiannual written reports that identify all days during which any visible fugitive particulate emissions were observed from "Block 4" of Building 351 and describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>
0.002 grain filterable PM_{10}/dscf

<u>Applicable Compliance Method</u>:

The filterable gr/dscf limitation was established in accordance with a rated outlet concentration for the HEPA filter of the manufacturer's guaranteed fabric filter grain loading. If required, the permittee shall demonstrate compliance with the filterable gr PM10/dscf by testing in accordance with Methods 201/201A of 40

CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:
0.60 ton filterable PM_{10}/year

Applicable Compliance Method:

The annual limitation was established by multiplying the maximum outlet concentration of 0.002 gr filterable PM_{10}/dscf and the maximum volumetric air flow rate (8,000 acfm) of HEPA filter (HEPA-351-4) and using the following conversion factors in order to covert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 lbs. Therefore, provided compliance is demonstrated with the 0.002 gr filterable PM_{10}/dscf limitation, compliance with the annual limitation will be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

c. Emission Limitation:
Visible stack particulate emissions shall not exceed 0% opacity, as a 6-minute average except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9.

d. Emission Limitation:

No visible fugitive particulate emissions from the building containing this emissions unit.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

g) Miscellaneous Requirements

(1) None.

4. P039, Air Arcing Unit AC-4B

Operations, Property and/or Equipment Description:

Air Arcing Unit

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 operations(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. 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)	Filterable particulate matter equal to or less than 10 microns in size (PM_{10}) shall not exceed 0.002 grain per dry standard cubic foot (dscf) and 0.60 ton per year for emissions units P038 and P039, combined. Visible stack particulate emissions (PE) shall not exceed 0% opacity, as a six-minute average [see b)(2)a.ii.] No visible fugitive particulate emissions from the building containing this emissions unit [see b)(2)a.iii. and iv.] 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 voluntary restrictions established in this permit.
c.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to voluntary restrictions established in this permit.

(2) Additional Terms and Conditions

a. This permit to install (PTI) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for particulate matter less than or equal to 10 microns in size (PM_{10}) from emission units P038 and P039 combined:

i. use of a control system consisting of multiple air filtration units as described below:

(a) a 20,000 acfm cartridge filter (FC-4B) shall be dedicated to solely control emissions unit P039. The exhaust from cartridge filter FC-4B shall exhaust into "Block 4" of Building 351. "Block 4" of Building 351 contains emissions unit P039 as well as emission units P038;

(b) a portion of the air within "Block 4" of Building 351 shall be re-circulated through an approximately 15,000 acfm HEPA filter. The exhaust from the HEPA filter exhausts into "Block 4" of Building 351;

(c) air will exit "Block 4" of Building 351 by being vented to an 8,000 acfm HEPA filter (HEPA-351-4) achieving a maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf;

ii. a visible emission restriction (associated with the air filtration control system) not to exceed 0% opacity as a 6-minute average from the HEPA filter (HEPA-351-4) stack controlling air exiting "Block 4" of Building 351;

iii. the stack for HEPA filter (HEPA-351-4) shall be the only point of egress for emissions from "Block 4" of Building 351 (i.e. all doors, windows, roof vents, etc. shall remain closed during all times of operation).

iv. a visible emission restriction (associated with the egress requirement in iii. above) of no visible fugitive particulate emissions from "Block 4" of Building 351.

The potential to emit (PTE) for emission units P038, and P039 combined is 0.60 ton filterable PM_{10}/year. The annual PTE was determined by multiplying the maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf by a maximum volumetric air flow of 8,000 acfm, applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1acfm, and 60 minutes/hr and multiplying the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. It should be noted that all emissions of particulate matter are PM_{10}.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be controlled in accordance with the air filtration requirements specified in this permit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain, equipment to continuously monitor the pressure drop, in inches of water, across HEPA filter (HEPA-351-4) 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 pressure drop across HEPA filter (HEPA-351-4) on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, 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.

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. 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, the pressure drop readings immediately after the corrective action, 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.

The acceptable range for the pressure drop across HEPA filter (HEPA-351-3) is 0.5 to 3 inches of water.

This range 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 based upon information obtained during future particulate emissions tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range 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 perform daily checks, when emissions unit P038 and/or P039 is/are in operation, for any visible fugitive particulate emissions from “Block 4” of Building 351. 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 location and color of the emissions;

b. the total duration of any visible emission incident; and any corrective actions taken to eliminate the visible emissions.

The permittee shall also perform daily checks of "Block 4" of Building 351 to ensure all doors, windows, roof vents, etc. are closed as required by b)(2)a.iii.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across HEPA filter (HEPA-351-4) was outside of the acceptable range specified by this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not controlled in accordance with the air filtration system specified by this permit;

c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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 semiannual written reports that identify all days during which any visible fugitive particulate emissions were observed from "Block 4" of Building 351 and describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>
0.002 grain filterable PM_{10}/dscf

<u>Applicable Compliance Method</u>:

The filterable gr/dscf limitation was established in accordance with a rated outlet concentration for the HEPA filter of the manufacturer's guaranteed fabric filter grain loading. If required, the permittee shall demonstrate compliance with the filterable gr PM10/dscf by testing in accordance with Methods 201/201A of 40

CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:
0.60 ton filterable PM_{10}/year

Applicable Compliance Method:

The annual limitation was established by multiplying the maximum outlet concentration of 0.002 gr filterable PM_{10}/dscf and the maximum volumetric air flow rate (8,000 acfm) of HEPA filter (HEPA-351-4) and using the following conversion factors in order to covert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 lbs. Therefore, provided compliance is demonstrated with the 0.002 gr filterable PM_{10}/dscf limitation, compliance with the annual limitation will be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

c. Emission Limitation:
Visible stack particulate emissions shall not exceed 0% opacity, as a 6-minute average except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9.

d. Emission Limitation:

No visible fugitive particulate emissions from the building containing this emissions unit.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

g) Miscellaneous Requirements

(1) None.

5. P040, De-Milling Operation

Operations, Property and/or Equipment Description:

De-Milling Operation

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 operations(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. 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)	Filterable particulate matter equal to or less than 10 microns in size (PM_{10}) shall not exceed 0.002 grain per dry standard cubic foot (dscf) and 0.60 ton per year for emissions units P036, P037 and P040, combined. Visible stack particulate emissions (PE) shall not exceed 0% opacity, as a six-minute average [see b)(2)a.ii.] No visible fugitive particulate emissions from the building containing this emissions unit [see b)(2)a.iii. and iv.] 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 voluntary restrictions established in this permit.
c.	OAC rule 3745-17-07(A)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to voluntary restrictions established in this permit.

(2) Additional Terms and Conditions

a. This permit to install (PTI) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for particulate matter less than or equal to 10 microns in size (PM_{10}) from emission units P036, P037, and P040 combined:

i. use of a control system consisting of multiple air filtration units as described below:

(a) a 6,000 acfm cartridge filter (DMF) shall be dedicated to solely control emissions unit P040. The exhaust from cartridge filter DMF shall exhaust into "Block 3" of Building 351. "Block 3" of Building 351 contains emissions unit P040 as well as emission units P036 and P037;

(b) a portion of the air within "Block 3" of Building 351 shall be re-circulated through an approximately 15,000 acfm HEPA filter. The exhaust from the HEPA filter exhausts into "Block 3" of Building 351;

(c) air will exit "Block 3" of Building 351 by being vented to an 8,000 acfm HEPA filter (HEPA-351-3) achieving a maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf;

ii. a visible emission restriction (associated with the air filtration control system) not to exceed 0% opacity as a 6-minute average from the HEPA filter (HEPA-351-3) stack controlling air exiting "Block 3" of Building 351;

iii. the stack for HEPA filter (HEPA-351-3) shall be the only point of egress for emissions from "Block 3" of Building 351 (i.e. all doors, windows, roof vents, etc. shall remain closed during all times of operation).

iv. a visible emission restriction (associated with the egress requirement in iii. above) of no visible fugitive particulate emissions from "Block 3" of Building 351.

The potential to emit (PTE) for emission units P036, P037, and P040 combined is 0.60 ton filterable PM_{10}/year. The annual PTE was determined by multiplying the maximum outlet concentration of 0.002 grain filterable PM_{10}/dscf by a maximum volumetric air flow of 8,000 acfm, applying the appropriate conversion factors of 7000 grains/lb, 1 dscf/1acfm, and 60 minutes/hr and multiplying the maximum operating schedule of 8760 hrs/yr and dividing by 2000 lbs/ton. It should be noted that all emissions of particulate matter are PM_{10}.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be controlled in accordance with the air filtration requirements specified in this permit at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain, equipment to continuously monitor the pressure drop, in inches of water, across HEPA filter (HEPA-351-3) 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 pressure drop across HEPA filter (HEPA-351-3) on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, 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.

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. 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, the pressure drop readings immediately after the corrective action, 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.

The acceptable range for the pressure drop across HEPA filter (HEPA-351-3) is 0.5 to 3 inches of water.

This range 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 based upon information obtained during future particulate emissions tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range 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 perform daily checks, when emissions unit P036, P037, and/or P040 is/are in operation, for any visible fugitive particulate emissions from “Block 3” of Building 351. 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 location and color of the emissions;

b. the total duration of any visible emission incident; and any corrective actions taken to eliminate the visible emissions.

The permittee shall also perform daily checks of "Block 3" of Building 351 to ensure all doors, windows, roof vents, etc. are closed as required by b)(2)a.iii.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time (start time and date, and end time and date) when the pressure drop across HEPA filter (HEPA-351-3) was outside of the acceptable range specified by this permit;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not controlled in accordance with the air filtration system specified by this permit;

c. each incident of deviation described in "a" (above) where a prompt investigation was not conducted;

d. each incident of deviation described in "a" where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in "a" where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

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 semiannual written reports that identify all days during which any visible fugitive particulate emissions were observed from "Block 3" of Building 351 and describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

f) Testing Requirements

(1) Compliance with the emission limitations in section b)(1) of the terms and conditions of this permit shall be determined in accordance with the following methods:

a. <u>Emission Limitation:</u>
0.002 grain filterable PM_{10}/dscf

<u>Applicable Compliance Method</u>:

The filterable gr/dscf limitation was established in accordance with a rated outlet concentration for the HEPA filter of the manufacturer's guaranteed fabric filter grain loading. If required, the permittee shall demonstrate compliance with the filterable gr PM10/dscf by testing in accordance with Methods 201/201A of 40

CFR, Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

b. Emission Limitation:
0.60 ton filterable PM_{10}/year

Applicable Compliance Method:

The annual limitation was established by multiplying the maximum outlet concentration of 0.002 gr filterable PM_{10}/dscf and the maximum volumetric air flow rate (8,000 acfm) of HEPA filter (HEPA-351-3) and using the following conversion factors in order to covert to tons per year: 1 lb/7000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 lbs. Therefore, provided compliance is demonstrated with the 0.002 gr filterable PM_{10}/dscf limitation, compliance with the annual limitation will be assumed.

If required, demonstration of the maximum volumetric air flow rate shall be determined in accordance with the test methods and procedures specified in 40 CFR, Part 60, Appendix A, Methods 1-4.

c. Emission Limitation:
Visible stack particulate emissions shall not exceed 0% opacity, as a 6-minute average except as provided by rule.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 9.

d. Emission Limitation:

No visible fugitive particulate emissions from the building containing this emissions unit.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60 ("Standards of Performance for New Stationary Sources"), Appendix A, U.S. EPA Reference Method 22.

g) Miscellaneous Requirements

(1) None.