



Environmental  
Protection Agency

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

4/24/2012

Certified Mail

Paul Huwer  
Honda of America Mfg., Inc. Anna Engine Plant  
12500 Meranda Road  
Anna, OH 45302-9699

Facility ID: 0575000174  
Permit Number: P0104359  
County: Shelby

RE: FINAL AIR POLLUTION CONTROL TITLE V PERMIT  
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. Please complete a survey at [www.epa.ohio.gov/dapc/permitsurvey.aspx](http://www.epa.ohio.gov/dapc/permitsurvey.aspx) and give us feedback on your permitting experience. We value your opinion.

The issuance of this Title V permit is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission 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, Southwest District Office. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: U.S. EPA Region 5 Via E-Mail Notification  
Ohio EPA DAPC, Southwest District Office





**FINAL**

**Division of Air Pollution Control  
Title V Permit**

for

Honda of America Mfg., Inc. Anna Engine Plant

Facility ID:	0575000174
Permit Number:	P0104359
Permit Type:	Renewal
Issued:	4/24/2012
Effective:	5/15/2012
Expiration:	5/15/2017





Division of Air Pollution Control
Title V Permit
for
Honda of America Mfg., Inc. Anna Engine Plant

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## Authorization

Facility ID: 0575000174  
Facility Description: Automobile manufacturing.  
Application Number(s): A0036224  
Permit Number: P0104359  
Permit Description: Title V Renewal for Honda's Anna, Ohio automobile engine manufacturing plant.  
Permit Type: Renewal  
Issue Date: 4/24/2012  
Effective Date: 5/15/2012  
Expiration Date: 5/15/2017  
Superseded Permit Number: P0088833

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

Honda of America Mfg., Inc. Anna Engine Plant  
12500 Meranda Road  
Anna, OH 45302-9699

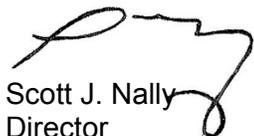
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southwest District Office  
401 East Fifth Street  
Dayton, OH 45402  
(937)285-6357

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Southwest District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Scott J. Nally  
Director



## **A. Standard Terms and Conditions**

**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

*(Authority for term: ORC 3704.036(A))*

**2. Monitoring and Related Record Keeping and Reporting Requirements**

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.

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

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

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

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

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

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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

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

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

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

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

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

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

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

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

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

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

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Southwest District Office.

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

### **3. Scheduled Maintenance**

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

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

### **4. Risk Management Plans**

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

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

## **5. Title IV Provisions**

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

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

## **6. Severability Clause**

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

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

## **7. General Requirements**

- a) 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 reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the

Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

- (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or a combination of (1) and (2) above.

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

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

**8. Fees**

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

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

**9. Marketable Permit Programs**

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

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

**10. Reasonably Anticipated Operating Scenarios**

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

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



## 11. Reopening for Cause

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

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

## 12. Federal and State Enforceability

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

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

## 13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible 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 paragraph (E) of OAC rule 3745-77-03.
  - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
  - (2) Compliance certifications shall include the following:
    - a. An identification of each term or condition of this permit that is the basis of the certification.
    - b. The permittee's current compliance status.
    - c. Whether compliance was continuous or intermittent.
    - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

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

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

#### 14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

#### 15. Operational Flexibility

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

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

#### 16. Emergencies

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

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

#### 17. Off-Permit Changes

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

## **18. Compliance Method Requirements**

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

*(This term is provided for informational purposes only.)*

## **19. Insignificant Activities or Emissions Levels**

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

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

## **20. Permit to Install Requirement**

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

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

**21. Air Pollution Nuisance**

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

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

**22. Permanent Shutdown of an Emissions Unit**

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

After the date on which an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

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

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

**23. Title VI Provisions**

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

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

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

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

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (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.)

**25. Records Retention Requirements Under State Law Only**

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

**26. Inspections and Information Requests**

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

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



**27. Scheduled Maintenance/Malfunction Reporting**

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

**28. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

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

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

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

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

## **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 following are facility-wide terms and conditions:
  - a) Pursuant to Ohio Administrative Code (OAC) rule 3745-31-05(D), the emissions from natural gas combustion for emissions units B050 and B051, and all the air contaminant sources that comprise the heating and ventilation system, inclusive, for this facility shall not exceed the following limitations:
    - (1) Particulate emissions (PE) shall not exceed 0.40 ton per rolling, 12-month summation;
    - (2) Nitrogen oxide (NO<sub>x</sub>) emissions shall not exceed 20.80 tons per rolling, 12-month summation;
    - (3) Carbon monoxide (CO) emissions shall not exceed 17.47 tons per rolling, 12-month summation;
    - (4) Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.12 tons per rolling, 12-month summation; and
    - (5) Volatile organic compound (VOC) emissions shall not exceed 1.14 tons per rolling, 12-month summation.
  - b) The natural gas fuel usage for emissions units B050 and B051, and all the air contaminant sources that comprise the heating and ventilation system, inclusive, for this facility shall not exceed 416 million standard cubic feet per rolling, 12-month summation of the natural gas usage records.

The permittee has sufficient existing records to demonstrate compliance with this limit during the first twelve months after issuance of this permit. Therefore, it is not necessary to establish natural gas usage limitations for the first 12-months of operation.
  - c) The permittee shall maintain monthly records of the following information for emissions units B050 and B051, and the air contaminant sources that comprise the heating and ventilation system, inclusive, for this facility:
    - (1) The monthly volume of natural gas used, in million(s) of standard cubic feet; and
    - (2) The rolling, 12-month summation of natural gas used, in million(s) of standard cubic feet.
  - d) The permittee shall submit quarterly deviation (excursion) reports for emissions units B050 and B051, and the air contaminant sources that comprise the heating and ventilation system, inclusive, for this facility which identify all exceedances of the rolling, 12-month natural gas usage limitation of 416 million standard cubic feet.
  - e) Compliance with the emission limitation(s) in section b)(1) for emissions units B050 and B051. of these terms and conditions shall be determined in accordance with the following method(s):

- (1) Emission Limitations:
- a. 0.40 ton PE per rolling, 12-month summation;
  - b. 20.80 tons NO<sub>x</sub> per rolling, 12-month summation;
  - c. 17.47 tons CO per rolling, 12-month summation;
  - d. 0.12 ton SO<sub>2</sub> per rolling, 12-month summation; and
  - e. 1.14 tons VOC per rolling, 12-month summation.

Applicable Compliance Method:

The rolling, 12-month emission limitations were established by multiplying the natural gas usage limitation, 416 million standard cubic feet, by the emissions factors identified in AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Tables 1.4-1 (9/98) and 1.4-2 (9/98). The emissions factors are: 1.9 lbs PE/million scf; 100 lbs NO<sub>x</sub>/million scf; 84 lbs CO/million scf; 0.6 lb SO<sub>2</sub>/million scf; and 5.5 lbs VOC/million scf. The results of the emissions are then divided by 2000 lbs/ton.

Compliance with the rolling, 12-month emission limitations is demonstrated based upon the record keeping in Part II - Section A.2 of this permit. Any exceedance of the rolling, 12-month natural gas usage limitation is also an exceedance of the rolling, 12-month emission limitations.

- f) This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B) and 3745-17-08(B) do not apply to the fugitive emissions from the affected emissions units at this facility.
- g) The particulate emissions (PE) from baghouse BH-4 serving emissions units P020, P087 and P902 shall not exceed 0.005 grain/dry standard cubic foot (dscf) of the total exhaust gases.

The PE from baghouse BH-5 serving emissions units P017, P910, and P901(tapping and charging) shall not exceed 0.005 grain/dscf of the total exhaust gases.

The PE from baghouse BH-6 serving emissions units P018, P020 and P075 shall not exceed 0.005 grain/dscf of the total exhaust gases.

The permittee reserves the right to direct the PE from any other existing or new emissions units to these baghouses with the understanding that emissions will not exceed 0.005 grain/dscf of the total exhaust gases and/or individual emission unit's permitted allowable emission limitation.

This right is allowed as long as the permittee does not trigger the modification definition pursuant to Ohio Administrative Code (OAC) rule 3745-31-01 and submits information to Ohio EPA within 30 days after the change(s) documenting the change(s). This information would include, but not limited to, the following: a description of which emissions units were redirected to which baghouse, and calculations supporting the permittee's contention that the redirection of existing emissions units would not trigger the modification definition pursuant to OAC rule 3745-31-01.



- h) The particulate emissions (PE) and/or particulate matter <10 micron (PM-10) from fabric filter baghouse(s) serving emissions unit P087 shall not exceed 0.005 grain of PE per actual cubic foot of the total exhaust gases.

The permittee reserves the right to direct the particulate and/or particulate matter <10 micron emissions from any other existing or new emissions units (once permitted and thereby considered existing) to these fabric filters with the understanding that emissions will not exceed 0.005 grain per actual cubic foot of the total exhaust gases and/or will not exceed any permitted allowable lb/hr stack and/or individual emission unit's permitted allowable emission limitation.

- i) This right is allowed as long as the permittee does not trigger the modification definition pursuant to Ohio Administrative Code (OAC) rule 3745-31-01 and submits information to the Ohio EPA within thirty days after the change(s) documenting the change(s). This information would include, but not limited to, the following: a description of which emissions units were redirected to which bag house, and calculations supporting the permittee's contention that the redirection of
j) CCCCCC - Gasoline Dispensing Facilities (Area Sources)
k) ZZZZZZ - Area Sources: Iron and Steel Foundries
l) The following insignificant emissions units are located at this facility:
m) The following insignificant emissions units are located at this facility:

Table with 2 columns: EU ID, Operations, Property and/or Equipment Description. Rows include B040 through B049 with details on generator capacity and OAC rule references.

P060	HPDC Melt Furnace Number 5, rated @ 3.3 TPH; OAC rule 3745-31-05(A)(3) (PTI#05-12461)
P074	HPDC Melt Furnace Number 6, rated @ 3.3 TPH (Modification), OAC rule 3745-31-05(A)(3) (PTI#05-12461)
P085	ALDC melt furnace number 1, OAC rule 3745-31-05(A)(3) (PTI#05-12351)
P092	Engine quality (EQ) stationary test fire, OAC rule 3745-31-05(A)(3) (PTI#05-13486)
P093	ALDC aluminum melting furnace no. 4 OAC rule 3745-31-05(A)(3) (PTI#05-14110)
P095	ALDC Aluminum Melting Operation with melting furnace, transfer trough, two electric holding furnaces, two heated launders, OAC rule 3745-31-05(A)(3) (PTI#05-14387)
P096	LPDC Aluminum Melting Operation with melting furnace, transfer trough, two electric holding furnaces and two heated launders OAC rule 3745-31-05(A)(3) (PTI#05-14387)

Each insignificant emissions unit at this facility must comply with all applicable State and Federal regulations, as well as any emissions limitations and/or control requirements contained within a permit-to-install for that emissions unit. Insignificant emissions units listed above that are not subject to specific permit-to-install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

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

## **C. Emissions Unit Terms and Conditions**

**1. B050, 11.9 mmBtu/hr natural gas fired boiler**

**Operations, Property and/or Equipment Description:**

11.9 mmBtu/hr natural gas fired boiler

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) and (PTI 05-12918)	Particulate emissions (PE) shall not exceed 0.002 lb/mmBtu and 0.1 ton per year (TPY)  Nitrogen oxide (NO <sub>x</sub> ) emissions shall not exceed 0.098 lb/mmBtu and 5.11 TPY.  Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu and 4.29 TPY.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.0006 lb/mmBtu and 0.03 TPY.  Volatile organic compound (VOC) emissions shall not exceed 0.0059 lb/mmBtu and 0.28 TPY.  Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.  See Sections B.2.a) to B.2.e), under "Facility-wide Terms and Conditions",

b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule
c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule

(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas and the emission limitations listed in term Section B.2.a) through B.2.e), “*Facility-Wide Terms and Conditions*”, above.
- b. The lb/mmBtu actual heat input and tons per year emission limitations are based on the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emission limitations.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI 05-12918]

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-12918]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Visible Emission Limitations:

10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A,

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

b. Emission Limitations:

0.002 lb/mmBtu, 0.1 TPY PE

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 1.9 lbs PE/10<sup>6</sup>scf (filterable) emission factor into lb NO<sub>x</sub>/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb NO<sub>x</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

[Authority for term: OAC rule 3745-17-10(B)(1) and 3745-77-07(C)(1)]

c. Emission Limitations:

0.098 lb/mmBtu, 5.11 TPY NO<sub>x</sub> emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 100 lbs NO<sub>x</sub>/10<sup>6</sup> scf emission factor into lb NO<sub>x</sub>/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb NO<sub>x</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitations:

0.082 lb/mmBtu, 4.29 TPY CO emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs NO<sub>x</sub>/10<sup>6</sup> scf emission factor into lb CO/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb CO/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitations:

0.0006 lb/mmBtu, 0.03 TPY SO<sub>2</sub> emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 0.6 lb SO<sub>2</sub>/10<sup>6</sup> scf emission factor into lb SO<sub>2</sub>/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb SO<sub>2</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitations:

0.0059 lb/mmBtu, 0.28 TPY VOC emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 5.5 lbs VOC/10<sup>6</sup> scf emission factor into lb VOC/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb VOC/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25 or 25A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**2. B051, 11.9 mmBTU/hr natural gas fired boiler**

**Operations, Property and/or Equipment Description:**

11.9 mmBtu/hr natural gas fired boiler

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) and (PTI 05-12918)	Particulate emissions (PE) shall not exceed 0.002 lb/mmBtu and 0.1 ton per year (TPY)  Nitrogen oxide (NO <sub>x</sub> ) emissions shall not exceed 0.098 lb/mmBtu and 5.11 TPY.  Carbon monoxide (CO) emissions shall not exceed 0.082 lb/mmBtu and 4.29 TPY.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.0006 lb/mmBtu and 0.03 TPY.  Volatile organic compound (VOC) emissions shall not exceed 0.0059 lb/mmBtu and 0.28 TPY.  Visible particulate emissions from any stack shall not exceed 10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.
b.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule

c.	OAC rule 3745-17-10(B)(1)	The emission limitation specified by these rules are less stringent than the emission limitation established pursuant to OAC rule
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(2) Additional Terms and Conditions

- a. Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the use of natural gas and the emission limitations listed in term Section B.2.a) through B.2.e)., *Facility-Wide Terms and Conditions*, above.
- b. The lb/mmBtu actual heat input and tons per year emission limitations are based on the emissions unit's potentials to emit. Therefore, no monitoring, record keeping, and reporting requirements are necessary to ensure ongoing compliance with these emission limitations.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI 05-12918]

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-12918]

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Visible Emission Limitations:

10% opacity, as a six-minute average, except for one 6-minute period per hour of not more than 27% opacity.

Applicable Compliance Method(s):

Compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Reference Method 9 in 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

b. Emission Limitations:

0.002 lb/mmBtu, 0.1 TPY PE

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 1.9 lbs PE/10<sup>6</sup>scf (filterable) emission factor into lb NO<sub>x</sub>/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb NO<sub>x</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 5.

[Authority for term: OAC rules 3745-17-10(B)(1) and 3745-77-07(C)(1)]

c. Emission Limitations:

0.098 lb/mmBtu, 5.11 TPY NO<sub>x</sub> emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 100 lbs NO<sub>x</sub>/10<sup>6</sup> scf emission factor into lb NO<sub>x</sub>/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb NO<sub>x</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 7.

[Authority for term: OAC rules 3745-77-07(C)(1)]

d. Emission Limitations:

0.082 lb/mmBtu, 4.29 TPY CO emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-1 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 84 lbs NO<sub>x</sub>/10<sup>6</sup> scf emission factor into lb CO/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb CO/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 10.

[Authority for term: OAC rules 3745-77-07(C)(1)]

e. Emission Limitations:

0.0006 lb/mmBtu, 0.03 TPY SO<sub>2</sub> emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 0.6 lb SO<sub>2</sub>/10<sup>6</sup> scf emission factor into lb SO<sub>2</sub>/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb SO<sub>2</sub>/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 6.

[Authority for term: OAC rules 3745-77-07(C)(1)]

f. Emission Limitations:

0.0059 lb/mmBtu, 0.28 TPY VOC emissions

Applicable Compliance Method:

The emission limitations were based upon the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, Section 1.4, Table 1.4-2 (9/98). Compliance with the lb/mmBtu emission limitation may be determined by converting the 5.5 lbs VOC/10<sup>6</sup> scf emission factor into lb VOC/mmBtu by dividing by 1,020 mmBtu/10<sup>6</sup> scf. Compliance with the annual emission limitation may be demonstrated by multiplying the lb VOC/mmBtu value by the maximum rated heat input capacity of the emissions unit (in mmBtu/hr), then multiplying by 8760 hrs/yr and dividing by 2000 lbs/ton.

If required, the permittee shall demonstrate compliance with the lb/mmBtu emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1- 4, and 25 or 25A.

[Authority for term: OAC rules 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**3. F001, Plant Roadways and Parking Lots**

**Operations, Property and/or Equipment Description:**

Plant Roadways and Parking Lots

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) (PTI 05-08004)	10.58 tons of particulate emissions (PE)/yr, from paved roadways and parking areas combined  There shall be no visible PE from any paved roadway or parking area, except for a period of time not to exceed 1 minute during any 60-minute observation period.  There shall be no visible PE from any unpaved roadway or parking area, except for a period of time not to exceed 3 minutes during any 60-minute observation period.  Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust.

(2) Additional Terms and Conditions

- a. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by application of chemical stabilization/dust suppressants and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-08004]

- b. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-08004]

- c. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-08004]

- d. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-08004]

- e. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-08004]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise specified in this section, the permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:
- a. for all paved roadways and parking areas, the minimum inspection frequency shall be weekly; and
  - b. for all unpaved roadways and parking areas, the minimum inspection frequency shall be weekly.

After the permittee has performed weekly inspections of the paved and the unpaved roadways and parking areas for one calendar quarter and no visible particulate emissions of fugitive dust have been observed, the permittee may begin inspections of the paved and the unpaved roadways and parking areas once per month. If visible particulate emissions of fugitive dust are observed during subsequent monthly inspections, the permittee shall return to an inspection frequency of once per week until no visible particulate emissions of fugitive dust are observed for another calendar quarter. All inspections shall be performed during representative, normal traffic conditions.

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

- (2) The permittee shall maintain records of the following information:
- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement any additional control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(2)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

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

e) Reporting Requirements

- (1) The permittee shall submit annual written reports that:
- a. any period in which visible emissions were observed in exceedance of the applicable limitations; and

- b. list of any additional control steps that were taken to reduce the fugitive dust emissions.

The annual deviation (excursion) reports shall be submitted by April 30<sup>th</sup> of each calendar year and shall cover the previous calendar year.

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

f) Testing Requirements

- (1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitation: 10.58 tons of PE/yr from paved roadways and parking areas combined.

Compliance Method: Compliance with the annual PE limitation for paved roadways and parking areas shall be determined using the following methodology (calculation) for paved roadways and parking lots, as referenced from AP-42, 5th Edition, Chapter 13.2.1, dated October 1997.

The formula for determining compliance with the annual emission limitation is the following:

$$E = k[(sL/2)**0.65] [(w/3)**1.5]$$

Where:

k = 38g of PE/vehicle mile traveled;

sL = 0.06g of PE/square mile; and

w = mean vehicle weight.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- b. Emissions Limitation:

No visible PE except for 6 minutes during any 60-minute observation period (for paved roadways and parking areas).

Applicable Compliance Method:

Compliance with the visible PE limitation for the paved roadways and parking areas specified in Section A of this permit shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**4. P006, Nine Cell Engine Test Dynamometers**

**Operations, Property and/or Equipment Description:**

Nine Cell Engine Test Dynamometers

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) and (PTI 05-14357)	Particulate emissions (PE) shall not exceed 1.21 pounds per hour.  Sulfur dioxide (SO <sub>2</sub> ) emissions shall not exceed 0.86 pound per hour.  Nitrogen oxides (NO <sub>x</sub> ) emissions shall not exceed 9.27 pounds per hour.  Volatile organic compounds (VOC) emissions shall not exceed 0.63 pound per hour.  Carbon monoxide (CO) emissions shall not exceed 7.05 pounds per hour.  The emissions from the natural gas employed in the Thermal Incinerators shall not exceed :  100 lbs of NO <sub>x</sub> /mmscf; 0.6 lbs of SO <sub>2</sub> / mmscf; 7.6 lbs of PE/mmscf; 5.5 lbs of VOC/mmscf; and 84 lbs of CO/mmscf.

b.	OAC rule 3745-31-05(D) (to avoid becoming a PSD major facility)	PE shall not exceed 1.97 tons per rolling, 12-month summation.  SO2 emissions shall not exceed 1.19 tons SO2 per rolling, 12-month summation.  NOx emissions shall not exceed 12.57 tons per rolling, 12-month summation.  VOC emissions shall not exceed 1.01 ton per rolling, 12-month summation.  CO emissions shall not exceed 9.27 tons per rolling, 12-month summation.
c.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for CO and VOC emissions)	See Section d)(1), below.
d.	OAC rule 3745-17-07(A)	See Section b)(2)a., below.
e.	OAC rule 3745-17-11	See Section b)(2)b., below

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- b. The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11 (A)(2)(a)(I), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.\*

\* The only materials introduced into this process are gaseous fuels and liquid fuels that are used solely as fuels for the purpose of combustion.

c) Operational Restrictions

- (1) The average combustion temperature within the thermal incinerators, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit (10 degrees Celsius) below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-14357]

- (2) The maximum annual operating hours for this emissions unit shall not exceed 24,400 hours. In addition, only 400 of the 24,400 hours shall be used to test engines of a size greater than 3.9 liters and not exceeding 5.3 liters. The operating hour restrictions are based upon a rolling, 12-month summation of the operating hours for all testing dynamometers combined.

The permittee has sufficient existing records to demonstrate compliance with these limits during the first 12-months following the issuance of this permit. Therefore it is not necessary to establish operating hour restriction for the first 12-months of operation.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-12918]

- (3) The permittee shall employ only unleaded fuel when operating this emissions unit.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-12918]

- (4) The permittee shall employ only natural gas in their thermal incinerators.

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-12918]

- (5) The maximum amount of fuel usage in any test cell shall not exceed 120 liters/hr (31.7 gallons/hr), nor 2,928,000 liters/12 month rolling period (773,577.6 gallons/12 month rolling period).

[Authority for Term: OAC rule 3745-77-07(A)(1) and PTI 05-12918]

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

- (1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measure and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. This requirement is limited to the incinerator that is operating or both when both incinerators are operating. Units shall be in degrees Fahrenheit (or Celsius). The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit (10 degrees Celsius) below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

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

- (2) The permittee shall maintain monthly records for this emissions unit of the following information:
- a. the operating hours for all test stands combined;
  - b. the rolling, 12-month summation of the operating hours for all test stands combined;
  - c. the operating hours for testing engines of a size greater than 3.9 liters and not exceeding 5.3 liters for all test stands combined;
  - d. the rolling, 12-month summation of the operating hours for testing engines of a size greater than 3.9 liters and not exceeding 5.3 liters for all test stands combined; and
  - e. the rolling, 12-month unleaded gasoline employed in the testing cells.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall conduct annual inspection of the incinerator, including the thermocouple(s). These annual inspection shall include any maintenance and evaluations that are recommended by the manufacturer and/or outlined in the operational manual. Records of maintenance and inspection activities will be documented by the permittee.

\* The annual maintenance inspection shall include a test of the lockout system to assure that it is properly operating. Description of the test methods used to test the lockout system and the results of the test shall be included with the above mentioned records.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance;
  - b. all instances where the emissions unit was operated without the incinerator(s) temperature(s) at or above 50 degrees Fahrenheit (10 degrees Celsius) below 1,425 degrees Fahrenheit (774 degrees Celsius) or the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance
  - c. all exceedances of the rolling, 12-month operating hours limitation of 24,400 hours;

- d. all exceedances of the rolling, 12-month operating hours limitation of 400 hours for testing engines of a size greater than 3.9 liters and not exceeding 5.3 liters;
- e. all exceedance of the 12-month unleaded gasoline usage limitation;
- f. all exceedances of the rolling, 12-month emission limitations of 1.97 ton PE, 1.19 ton of SO<sub>2</sub>, 1.01 tons of VOC, 9.27 tons of CO , and 12.57 tons of NO<sub>x</sub> (any exceedance of the hours of operation restrictions shall be an exceedance of the emission limitations.); and
- g. failure to perform annual inspection as out lined in Section d)(4), 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.

[Authority for term: OAC rule 3745-15-03(B)(1)(a)], OAC rule 3745-15-03(C), OAC rule 3745-77-07(A)(3)(c) and 40 CFR Part 64]

- (2) The permittee shall submit deviation (excursion) reports to Ohio EPA, Southwest District Office, that identify each day when a fuel other than unleaded fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the event occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitations:

1.21 lbs of PE/hr and 1.97 tons PE per rolling, 12-month summation

0.86 lb of SO<sub>2</sub>/hr and 1.19 tons SO<sub>2</sub> per rolling, 12-month summation

The hourly and annual PE and SO<sub>2</sub> emission limitations were established respectively as follows:

$$E_r = [(U) \times (0.2642 \text{ gal/liter}) \times (EF) \times (9 \text{ dyno stands})] + [(2) \times (5\text{mm Btu/hr}) \times (1 \text{ scf/1020 Btu}) \times (EE)]$$

$$A_r = [(U) \times (0.2642 \text{ gal/liter}) \times (EF) \times (24,000 \text{ hrs} + 400 \text{ hrs}) + (2) \times (5\text{mm Btu/hr}) \times (1 \text{ scf/ 1020Btu}) \times (EE) \times (8,760 \text{ hrs/yr}) / (2000 \text{ lbs/ton})$$

Where:

$E_r$  = the maximum hourly emission rate;

$A_r$  = the annual emission rate based upon limited operating hours;

$U$  = the maximum gas usage rate of 120 liters/hour;

EF = the emissions factor of 0.004 lb PE/gallon or 0.003 lb SO<sub>2</sub>/gal, as applicable (Based on June 2001 emission test at HRA-O); and

EE = the emission factor for natural gas combustion, 7.6 lbs PE/million scf or 0.6 lb SO<sub>2</sub>/million scf., as applicable (from AP-42, Table 1.4-2, revised 7/98).

Applicable Compliance Method:

If required, compliance with the hourly PE and SO<sub>2</sub> emission limitations shall be demonstrated based on the results of emission testing conducted in accordance with Methods 5 and/or 6, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the rolling, 12-month emission limitations is demonstrated based upon the record keeping in Section d)(3), of this permit. Any exceedance of the rolling, 12-month operating hour restrictions is also an exceedance of the rolling 12-month PE and SO<sub>2</sub> emission limitations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emissions Limitations:

0.63 lb VOC/hr and 1.01 tons VOC per rolling, 12-month summation

The hourly and annual VOC emission limitations were established respectively as follows:

$$E_r = [(U) \times (0.2642 \text{ gal/liter}) \times (EF) \times (9 \text{ dyno stands}) \times (1 - DRE)] + [(2) \times (5 \text{ mm Btu/hr}) \times (1 \text{ scf/ } 1020 \text{ Btu}) \times (EE)]$$

$$A_r = \{[(U) \times (0.2642 \text{ gal/liter}) \times (EF) \times (24,400 \text{ hrs}) \times (1 - DRE)] + [(2) \times (5 \text{ mm Btu/hr}) \times (1 \text{ scf/ } 1020 \text{ Btu}) \times (EE) \times (8,760 \text{ hrs/yr})] \} / (2000 \text{ lbs/ton})$$

Where:

$E_r$  = the maximum hourly emission rate;

$A_r$  = the annual emission rate based upon limited operating hours;

$U$  = the maximum gas usage rate of 120 liters/hour;

EF = the emissions factor of 0.2 lb VOC/gallon (Based on June 2001 emission test at HRA-O);

DRE = the destruction removal efficiency of the thermal oxidizer, 99% or 0.99; and

EE = the emission factor for natural gas combustion, 5.5 lbs VOC/million scf (from AP-42, Table 1.4-2, revised 7/98)

Applicable Compliance Method:

If required, compliance with the hourly VOC limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the rolling, 12-month emission limitation is demonstrated based upon the record keeping in d)(3), of this permit. Any exceedance of the rolling, 12-month operating hour restrictions is also an exceedance of the rolling 12-month VOC emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emissions Limitations:

9.27 lbs NOx/hr and 12.57 tons NOx per rolling, 12-month summation

Applicable Compliance Method:

The hourly NOx emission limitation was established as follows:

$$(1.03 \text{ lb NOx/engine hr}) \times (9 \text{ Test Cells/hr}) = \text{ lbs NOx/hr}$$

$$(1.03 \text{ lb NOx/engine hr}) \times (24,400 \text{ hours/year}) \times (1 \text{ ton}/2000 \text{ lbs}) = \text{ tons NOx/yr}$$

Where, the emissions factor of 1.03 lb/hr per engine hour (Based on Honda Anna 11/01 emission test results for this emissions unit)

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with Methods 7, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the rolling, 12-month emission limitation is demonstrated based upon the record keeping in d)(3), of this permit. Any exceedance of the rolling, 12-month operating hour restrictions is also an exceedance of the rolling 12-month, NOx emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emissions Limitation:

7.05 lbs CO/hr

Applicable Compliance Method:

The hourly CO emission limitation was established as follows:

First, determine the standard flow rate for each type of engine tested:

- i. liter engines flow rate =  $(0.5)(6300 \text{ rpm})(3.9 \text{ liters})(0.0353 \text{ cf/liter})(528 \text{ deg R}/1460 \text{ deg R}) = 156.8 \text{ scfm}$
- ii. 5.3 liter engines flow rate =  $(0.5)(6300 \text{ rpm})(5.3 \text{ liters})(0.0353 \text{ cf/liter})(528 \text{ deg R}/1460 \text{ deg R}) = 213.13 \text{ scfm}$

Second, determine the mass rate of emissions with a maximum CO concentration of 11%:  $\text{CO emission rate} = (0.11)(28.01 \text{ lbs/lb-mol}) / 385.4 \text{ scf/lb-mol} = 0.008 \text{ lb CO/scf}$

Finally, determine hourly emissions rate with eight (8) dynamometers testing 3.9 liter engines, and one (1) dynamometer testing 5.3 liter engines:

$$C_e = [(8)(156.83 \text{ scf/min}) + (1)(213.13 \text{ scf/min})](0.008 \text{ lb CO/scf})(60 \text{ min/hr})(1 - \text{DRE}) + [(2)(5 \text{ mm Btu/hr})(1 \text{ scf}/1020 \text{ Btu})(\text{EF})]$$

Where:

$C_e$  = the maximum hourly CO emission rate;

DRE = the destruction removal efficiency of the thermal oxidizers, 99%; and

EF = the emission factor for natural gas combustion, 84.0 lbs CO/million scf (from AP-42, Table 1.4-1, revised 7/98).

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance based on the results of emission testing conducted in accordance with Methods 10, as appropriate, of 40 CFR, Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- e. Emission Limitation:

9.27 tons CO per rolling, 12-month summation

The annual CO emission limitation was established as follows:

$$C_a = [(24,000 \text{ hrs/yr})(156.83 \text{ scf/min}) + (400 \text{ hrs/yr})(213.13 \text{ scf/min})](0.008 \text{ lb CO/scf})(60 \text{ min/hr})(1 - \text{DRE})(1 \text{ ton}/2000 \text{ lbs}) + [(2)(5 \text{ mm Btu/hr})(1 \text{ scf}/1020 \text{ Btu})(\text{EF})(8760 \text{ hrs/yr})(1 \text{ ton}/2000 \text{ lbs})]$$

Where:

$C_a$  = the annual CO emission rate;

DRE = the destruction removal efficiency of the thermal oxidizers, 99%; and

EF = the emission factor for natural gas combustion, 84.0 lbs CO/million scf (from AP-42, Table 1.4-1, revised 7/98).

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitation is demonstrated based upon the record keeping in d)(3), of this permit. Any exceedance of the rolling, 12-month operating hour restrictions is also an exceedance of the rolling 12-month, CO emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance for allowable emissions limitations for CO and NOx. The testing shall be conducted separately for each thermal oxidizer.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) and control efficiency, as applicable.
    - i. CO: Methods 1-4 and 10 of 40 CFR Part 60, Appendix A; and
    - ii. NOx: Methods 1-4 and 7 or 7A of 40 CFR Part 60, Appendix A.
- Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to Ohio EPA, Southwest District Office 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 Ohio EPA, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**5. P017, Mold Making Line No. 1**

**Operations, Property and/or Equipment Description:**

Mold Making Line No. 1

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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) and PTI P0105716	<p>The OC emissions from this emissions unit shall not exceed 8.1 lbs/hr from the application of mold release.</p> <p>See Section b)(2)a., thru d., c)(4) and (5), d)(4) and(5), e)(1) and (2), f)(1)a., and f)(2), below.</p>
b.	OAC rule 3745-31-05(D) (to avoid becoming a PSD major facility)	<p>The particulate emissions (PE) from baghouse # 5, which controls emissions from emissions unit P017, emissions unit P910, Holding Furnaces, and charging and tapping of emissions unit P901, Cupola, shall not exceed 11.25 tons (PE)/ rolling, 12-month period.</p> <p>The fugitive emissions from P017 shall not exceed 0.71 tons of PE/ rolling, 12-month period.</p> <p>The OC emissions from this emissions unit shall not exceed 29.2 tons/ rolling, 12-month period.</p> <p>See Section c)(1), (2), and (3), d)(1), (2), and (3), e)(1), f)(1)b., and f)(1)e., below.</p>

c.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.  See Section f)(1)f., below.
d.	OAC rule 3745-17-11(B)(1) Figure II curve P-1	The PE emissions shall not exceed 21.34 lbs per hour  See Section f)(1)c., below.
e.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	See Sections b)(2)a., thru c., c)(1) and (2), d)(1) thru (3) and (4), e)(1), f)(1)d., and f)(2), below.
f.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)g., below.
g.	40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)	The permittee shall comply with the applicable emission limitations(s) as specified in 40 CFR Part 63, Subpart ZZZZZ, (Iron and Steel Foundries Area Sources), in accordance with 40 CFR Parts 63.10895.  Should Subpart ZZZZZ be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.

(2) Additional Terms and Conditions

a. This permit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI P0105716]

b. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI P0105716]

- c. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI P0105716]

- d. The hourly OC emission limitations were established to reflect the maximum potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI P0105716]

- e. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI P0105716]

- f. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions from this emissions unit since the potential emissions are less than ten tons per year.

[Authority for Term: OAC rule 3745-31-05(A)(3) and PTI P0105716]

c) **Operational Restrictions**

- (1) The maximum operating hours for emissions units P017 shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (2) The maximum amount of sand processed through emissions units P017 shall not exceed 394,623 tons per rolling, 12-month period.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (3) The amount of mold release employed in this emission unit shall not exceed 14,400 gallons/ rolling, 12-month period.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (4) The organic content of the mold release employed in this emission unit shall not exceed 4.05 pounds/gallon.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (5) This emission unit shall employ mold binders that contain no volatile organic compounds.

[Authority for Term: OAC rule 3745-77-07(A)(1)]

- (6) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)

[Authority for term: 40 CFR 63.10880-109060]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the hours that baghouse #5 was operated;
- b. the particulate emissions (PE) rate from baghouse # 5, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- c. the monthly PE from baghouse #5, in tons, (the summation of:  $\{[("b" \times 72,948 \text{ acfm}) \times 60 \text{ mins/hr} \times (1\text{lb}/7,000)] \times "a" \} / 2,000 \text{ lbs/ton}$ ); and
- d. the rolling, 12-month total PE from baghouse # 5. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("j") plus the total amount of PE for the 11 previous calendar months)

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:

- a. the amount of sand employed in emissions unit P017, in tons;
- b. the rolling, 12-month total sand usage in emissions unit P017. The rolling, 12-month summation of the total sand employed (the total amount of sand employed for the current month ("a") plus the total amount of sand employed for the 11 previous calendar months);
- c. the monthly fugitive PE emissions, in tons, (the summation of:  $\{[(\text{sand usage "a"} \times 3.6 \text{ lbs of PE/ton of sand employed, from Fire SCC 304000350,}) \times (1 - \text{hooding capture efficiency (99.9\%), best engineering assumption})] / 2000 \text{ lbs/ton}\}$ ; and

- d. the rolling, 12-month total fugitive PE from P017. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month ("n") plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain monthly records of the following information:
  - a. the total operating hours;
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
  - c. the amount of mold release employed, in gallons employed;
  - d. the organic content of each mold release employed, in pounds per gallon;
  - e. the monthly OC emissions from the use of mold release, in tons, (the summation of: ("c" x "d")/2,000 lbs/ton);
  - f. the rolling, 12-month total OC emissions from the use of mold release. The rolling, 12-month summation of the total amount of OC emissions (the total amount of OC emissions for the current month ("e") plus the total amount of OC emissions for the 11 previous calendar months); and

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)

[Authority for term: 40 CFR 63.10880-109060]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month period OC emission limitation of 29.2 tons;
  - b. all exceedances of the combined rolling, 12-month period PE limitation of 11.25 tons from baghouse # 5, (emissions from emissions unit P017, emissions unit P910, Holding Furnaces, and the charging and tapping of emissions unit P901, Cupola);
  - c. all exceedances of the rolling 12-month period sand usage of 394,623 tons per rolling 12-month period in emissions unit P017;
  - d. all exceedances of the rolling 12-month period fugitive PE limitation of 0.71 tons per rolling 12-month period from emissions unit P017;
  - e. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and/or
  - f. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that:
- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)

[Authority for term: 40 CFR 63.10880-109060]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitation:

8.1 lb of OC emissions/hr

The hourly OC emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = \mu \times OC$$

where

HER = Hourly emission rate, in lbs of OC/hr;

$\mu$  = Mold release usage rate, in gallons/hr ( 2 gallons/hr, from Honda data); and

OC = Organic Compound (OC) content of the mold release, in pounds of OC per gallon of mold release (4.05, from Honda data).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the understanding that the maximum hourly usage of mold release will not exceed 2 gallons per hour and the maximum OC content of the mold release employed would not exceed 4.05 lbs/gallon.

If required, the permittee shall demonstrate formulation data or USEPA Method 24 shall be used to determine the VOC content of each mold release employed.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

29.2 tons OC/12-month rolling period, including fugitives.

The hourly OC emission limitation represent the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = \text{Mu} \times \text{Oc}$$

Where:

AER = Annual Emission Rate, in tons per rolling 12-month period;

Mu = Mold release usage rate, in gallons/ rolling 12-month period (14,400), from Honda data); and

Oc = Organic Compound (OC) content of the mold release, in pounds of OC per gallon of mold release (4.05, from Honda data).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

21.34 lbs of PE/hr

The hourly emission limitation was established by the following methodology:

$$\text{AMR} = 0.5782 \times (\text{U to the power of } 0.6456)$$

Where:

AMR = Allowable Mass Emission Rate, in lbs/hr;

U = Uncontrolled particulate emissions, in lbs/hr (Fire, SCC 304000350, emission factor of , 3.6 lbs emitted/ton of sand multiplied by 74.3 tons of sand /hr maximum).

Emission calculation is based on the requirements of OAC rule 3745-17-11(B)(1) Figure II, curve P-1.

Applicable Compliance Method:

Compliance with the above limitations is based on the 74.3 tons of sand employed being the maximum potential sand usage in this emissions unit and emission testing demonstrating 0.005 grains/ dscf requirement.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

The particulate emissions (PE) from baghouse # 5, which controls emissions from emissions unit P017, emissions unit P910, Holding Furnaces, and the charging and tapping of emissions unit P901, Cupola, shall not exceed 11.25 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 5, in acfm, (72,948, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/ dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P017, shall not exceed 0.71 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$\text{FER} = [(\text{MSR} \times \text{Ef}) \times (1-\text{CAP})] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum sand usage rate, in tons, (394,623 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of sand, (3.6 lbs/ton of sand, Fire SCC 304000350); and

CAP = Assumed capture efficiency, in %, (99.9% (0.999), from data provided by Honda).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(6), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for on any baghouse(s) that this emissions unit is controlled by to demonstrate compliance with the allowable PE limitations.
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.

- i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-109060]

- g) Miscellaneous Requirements

- (1) None.

**6. P018, Rough Finishing System**

**Operations, Property and/or Equipment Description:**

Rough Finishing System

- 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(D) (to avoid becoming a PSD major facility)	The particulate emissions (PE) from baghouse # 6, which controls emissions from emissions unit P018, emissions unit P075, Line 1 Shotblast, and emissions unit P020, Line 1 Didion, shall not exceed 12.15 tons (PE)/ rolling, 12-month period.  The fugitive emissions from P018 shall not exceed 0.62 tons of PE/ rolling, 12-month period.
b.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.
c.	OAC rule 3745-17-11(B)(1) Figure II curve P-1	The PE emissions shall not exceed 23.7 lbs per hour.
d.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	See Sections b)(2)a., thru d., c)(1) and (2), d)(1) thru (3), e)(1), f)(1)b., and f)(2), below.
e.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)e., below.

f.	40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)	<p>The permittee shall comply with the applicable emission limitations(s) as specified in 40 CFR Part 63, Subpart ZZZZZ, (Iron and Steel Foundries Area Sources), in accordance with 40 CFR Parts 63.10895.</p> <p>Should Subpart ZZZZZ be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.</p>
g.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(4), below.

(2) Additional Terms and Conditions

- a. This permit for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term PTI P0105716]

- b. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term PTI P0105716]

- c. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control devise associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: PTI P0105716]

- d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still

exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

[Authority for term: PTI P0105716]

- e. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions from this emissions unit since the potential emissions are less than ten tons per year.

[Authority for term: PTI P0105716]

c) Operational Restrictions

- (1) The maximum operating hours for emissions units P018 shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0105716]

- (2) The maximum amount of metal processed through emissions units P018 shall not exceed 72,900 tons per rolling 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0105716]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the total operating hours;
- b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
- c. the hours that baghouse # 6 was operated;
- d. the particulate emissions (PE) rate from baghouse # 6, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse #6, in tons, (the summation of:  $(\{[["d" \times 78,719 \text{ acfm}] \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a" \} / 2,000 \text{ lbs/ton})$ ); and

- f. the rolling, 12-month total PE from baghouse # 6. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

- (2) The permittee shall maintain monthly records of the following information:

- a. the amount of metal processed in emissions unit P018, in tons;
- b. the rolling, 12-month total metal processed in emissions unit P018. The rolling, 12-month summation of the total sand employed (the total amount of metal processed employed for the current month ("a") plus the total amount of metal processed employed for the 11 previous calendar months);
- c. the monthly fugitive PE emissions, in tons, (the summation of:  $\{[(\text{metal processed "a"} \times 17.0 \text{ lbs of PE/ton of metal processed, from Fire SCC 304000340,}) \times (1 - \text{hooding capture efficiency (99.9\%), best engineering assumption})]\} / 2000 \text{ lbs/ton}$ ); and
- d. the rolling, 12-month total fugitive PE from P018. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month ("c") plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;

- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

- (5) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all exceedances of the combined rolling, 12-month period PE limitation of 12.15 tons from baghouse # 6, (emissions from emissions unit P018, emissions unit P075, Line 1 Shotblast, and emissions unit P020, Line 1 Didion,);
  - b. all exceedances of the rolling 12-month period metal processed of 72,900 tons per rolling 12-month period in emissions unit P018;
  - c. all exceedances of the rolling 12-month period fugitive PE limitation of 0.62 tons per rolling 12-month period from emissions unit P018;
  - d. all exceedances of the rolling, 12-month period 7,200 operation hour limitation. The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit; and/or
  - e. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

(3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

23.7 lbs of PE/hr

The hourly emission limitation was established by the following methodology:

$$AMR = 0.5782 \times (U \text{ to the power of } 0.6456)$$

where:

AMR = Allowable Mass Emission Rate, in lbs/hr;

U = Uncontrolled particulate emissions, in lbs/hr (Fire, SCC 304000340, emission factor of , 17.0 lbs emitted/ton of metal multiplied by 18.5 tons of metal processed /hr maximum).

Emission calculation is based on the requirements of OAC rule 3745-17-11(B)(1) Figure II, curve P-1.

Applicable Compliance Method:

Compliance with the above limitations is based on the 18.5 tons of metal processed being the maximum potential process rate for this emissions unit and emission testing demonstrating 0.005 grains/ dscf requirement.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 6, which controls emissions from emissions unit P018, emissions unit P075, Line 1 Shotblast, and emissions unit P020, Line 1 Didion, shall not exceed 12.15 tons/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$AER = [(Af \times Ef \times 60 \text{ mins/hr} \times Cf) \times Ho] / 2000$$

where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse #6, in acfm, (78,719, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P018, shall not exceed 0.62 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$FER = [(MSR \times Ef) \times (1-CAP)] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum metal processed rate, in tons, (72,900 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of sand, (17.0 lbs/ton of metal charged, Fire SCC 304000340); and

CAP = Assumed capture efficiency, in %, (99.9% (0.999), from data provided by Honda).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(6), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for on baghouse # 6 and all baghouses that this emissions unit is controlled by to demonstrate compliance with the allowable PE limitations.

a. The emission testing shall be conducted within 1 year prior to the expiration of permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

g) Miscellaneous Requirements

- (1) None.

**7. P020, Extraction/Shakeout/Sand Sep. and Cooling Line 1**

**Operations, Property and/or Equipment Description:**

Extraction/Shakeout/Sand Sep. and Cooling Line 1

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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) and PTI P0105716	<p>The combined stacked Carbon Monoxide (CO) emissions from emissions units P020 and P902 shall not exceed 61.8 lbs./hr</p> <p>The combined stacked Organic Compound (OC) emissions from emissions units P020 and P902 shall not exceed 18.32 lbs of organic compound (OC) emissions/hr</p>
b.	OAC rule 3745-31-05(D) (to avoid becoming PSD major facility)	<p>The particulate emissions (PE) from baghouse # 6, which controls emissions from emissions unit P020, emissions unit P075, Line 1 Shotblast, and emissions unit P018, Rough finishing system, shall not exceed 12.15 tons (PE)/ rolling 12-month period.</p> <p>The particulate emissions (PE) from baghouse # 4, which controls emissions from emissions unit P020, emissions unit P902, Autopour I Furnace, and emissions unit P087, Disc M/C, shall not exceed 11.53 tons (PE)/ rolling 12-month period.</p> <p>The fugitive emissions from P020 shall not exceed 0.92 tons of PE/ rolling 12-month period.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The combined Carbon Monoxide (CO) from emissions units P020 and P902 shall not exceed 95.72 tons/ 12-month period, based on a rolling, 12-month summation, including fugitives.</p> <p>The combined Organic Compound (OC) emissions from emissions units P020 and P902 shall not exceed 28.4 tons/ 12-month period, based on a rolling, 12-month summation, including fugitives.</p>
c.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any roof vent that emits emissions into the ambient air from this emission unit shall not exceed 20% opacity, as a 6-minute average.
d.	OAC rule 3745-17-11(B)(1) Figure II curve P-1	The PE emissions shall not exceed 8.1 lbs. per hour.
e.	40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)	<p>The permittee shall comply with the applicable emission limitations(s) as specified in 40 CFR Part 63, Subpart ZZZZZ, (Iron and Steel Foundries Area Sources), in accordance with 40 CFR Parts 63.10895.</p> <p>Should Subpart ZZZZZ be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.</p>

(2) Additional Terms and Conditions

- a. This permit for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term PTI P0105716]

- b. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term PTI P0105716]

- c. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term PTI P0105716]

- d. The hourly OC and CO emission limitations were established to reflect the maximum potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

[Authority for term PTI P0105716]

c) Operational Restrictions

- (1) The maximum operating hours for emissions units P020 shall not exceed 7,200, based upon a rolling, 12 month summation of the operating hours.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0105716]

- (2) The maximum amount of metal processed through emissions units P020 shall not exceed 57,320 tons per rolling 12-month period.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0105716]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the total operating hours;
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
  - c. the hours that baghouse # 6 was operated;

- d. the particulate emissions (PE) rate from baghouse # 6, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse #6, in tons, (the summation of:  $\{[("d" \times 78,719 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a"\} / 2,000 \text{ lbs/ton}$ ); and
- f. the rolling, 12-month total PE from baghouse # 6. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

(2) The permittee shall maintain monthly records of the following information:

- a. the hours that baghouse # 4 was operated;
- b. the particulate emissions (PE) rate from baghouse # 4, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- c. the monthly PE from baghouse # 4, in tons, (the summation of:  $\{[("b" \times 74,731 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a"\} / 2,000 \text{ lbs/ton}$ ); and
- d. the rolling, 12-month total PE from baghouse # 4. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("c") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

(3) The permittee shall maintain monthly records of the following information:

- a. the amount of metal processed in emissions unit P020, in tons; and
- b. the rolling, 12-month total metal processed in emissions unit P020. The rolling, 12-month summation of the total metal employed (the total amount of metal employed for the current month ("a") plus the total amount of sand employed for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

(4) The permittee shall maintain monthly records of the following information:

- a. the carbon monoxide (CO) rate, in pounds per ton of metal processed, 3.34 lbs/ton of metal or result from most recent stack test;
- b. the monthly CO emissions, in tons, (the summation of:  $\{(\text{metal processed "Section d)(3).a."} \times "a')\} / 2000 \text{ lbs/ton}$ ); and

- c. the rolling, 12-month total CO emissions from P020 & P902. The rolling, 12-month summation of the total CO emissions (the total amount of CO emitted for the current month ("b") plus the total amount of CO emitted for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

- (5) The permittee shall maintain monthly records of the following information:
  - a. the organic compound (OC) rate, in pounds per ton of metal processed, 0.99 lbs/ton of metal or result from most recent stack test;
  - b. the monthly OC emissions, in tons, (the summation of: {(metal processed "Section d)(3)a." x "a")} +[(metal processed "Section d)(3)a." x "a") x (("a" x 1/99.0%) - "a")]} / 2000 lbs/ton}; and
  - c. the rolling, 12-month total OC emissions from P020 & P902. The rolling, 12-month summation of the total OC emissions (the total amount of OC emitted for the current month ("b") plus the total amount of OC emitted for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

- (6) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

- (7) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI P0105716]

(8) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the combined rolling, 12-month period PE limitation of 12.15 tons from baghouse # 6, (emissions from emissions unit P018, emissions unit P075, Line 1 Shotblast, and emissions unit P020, Line 1 Didion,);
- b. all exceedances of the combined rolling, 12-month period PE limitation of 11.53 tons from baghouse # 4, (emissions from emissions unit emissions unit P020, emissions unit P902, Autopour I Furnace, and emissions unit P087, Disc M/C.);
- c. all exceedances of the rolling 12-month period metal processed of 57,320 tons, in emissions unit P020;
- d. all exceedances of the rolling, 12-month period 7,200 operation hour limitation. The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit; and/or
- e. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)].

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

(3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

8.1 lbs of PE/hr

The hourly emission limitation was established by the following methodology:

$$AMR = 0.5782 \times (U \text{ to the power of } 0.6456)$$

Where:

AMR = Allowable Mass Emission Rate, in lbs/hr;

U = Uncontrolled particulate emissions, in lbs/hr (Fire, SCC 304000331, emission factor of , 3.2 lbs emitted/ton of metal processed multiplied by 18.5 tons of metal processed /hr maximum).

Emission calculation is based on the requirements of OAC rule 3745-17-11(B)(1) Figure II, curve P-1.

Applicable Compliance Method:

Compliance with the above limitations is based on the 87.5 tons of metal processed being the maximum potential process rate for this emissions unit and emission testing demonstrating 0.005 grains/ dscf requirement.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 6, which controls emissions from emissions unit P020, emissions unit P075, Line 1 Shotblast, and emissions unit P018, Rough Finish, shall not exceed 12.15 tons/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$AER = [(Af \times Ef \times 60 \text{ mins/hr} \times Cf) \times Ho] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse #6, in acfm, (78,719, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

c. Emission Limitation:

The particulate emissions (PE) from baghouse # 4, which controls emissions from this emissions unit shall not exceed 11.53 tons/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse #4, in acfm, (74,731, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

d. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P020, shall not exceed 0.92 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$\text{FER} = [(\text{MSR} \times \text{Ef}) \times (1-\text{CAP})] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum metal processed rate, in tons, (57,320 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (3.2 lbs/ton of metal, Fire SCC 304000340); and

CAP = Assumed capture efficiency, in %, (99.0% (0.990)), from data provided by Honda).

Applicable Compliance Method:

Compliance is assumed based on the maintenance and upkeep of the hooding and duct work emissions unit and the throughput records in section d)(3) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

e. Emission Limitation:

61.8 lb of CO stacked emissions/hr, combined emissions from P020 and P902

The hourly CO emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{HER} = \text{COER} \times \text{MMR}$$

Where:

HER = Hourly emission rate, in lbs of CO/hr;

COER = Emission factor, in lbs/ton of metal processed, (3.34 lbs/ton processed, Honda's Emission Tests 2009); and

MMR = Maximum tons of metal processed per hour, (18.5 tons/hr, from Honda's Emission Activity Category form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the understanding that the maximum hourly metal processed will not exceed 18.5 tons/hr.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

f. Emission Limitation:

95.72 tons of CO/ 12-month period, based on a rolling, 12-month summation, including fugitives, combined from P020 and P902.

Applicable Compliance Method:

The annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = [(\text{COEF} \times \text{MMR}) + \{((\text{COER} \times (1/\text{CAP})) - \text{COER}) \times \text{MMR}\}] / 2000$$

Where:

AER = Annual Emission Rate;

COER = Carbon monoxide Emission Rate (3.34 lbs/ton processed, Honda's Emission Test 2000);

CAP = Hooding Capture Efficiency, (based on Honda's best estimate on hooding capture of 99.0%, (0.990)); and

MMR = Maximum tons processed per 12-months (57,320, Honda's Emission Activity Form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(4), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

g. Emission Limitation:

18.32 lbs of OC stacked emissions/hr, combined from P020 and P902.

The hourly OC emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{HER} = \text{COER} \times \text{MMR}$$

Where:

HER = Hourly Emission Rate, in lbs of OC/hr;

OCER = Emission factor, in lbs/ton of metal processed, (0.99 lbs/ton processed, Honda's Emission Tests 2000); and

MMR = Maximum tons of metal processed per hour, (18.5 tons/hr, from Honda's Emission Activity Category form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the understanding that the maximum hourly metal processed will not exceed 18.5 tons/hr.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

h. Emission Limitation:

28.4 tons of OC/ 12-month period, based on a rolling, 12-month summation, including fugitives, combined from P020 and P902.

The annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$AER = [(OCEF \times MMR) + ( \{ [(OCER \times (1/CAP)) - OCER] \times MMR \} ) ] / 2000$$

Where:

AER = annual emission rate;

OCER = Organic Compound Emission Rate, (0.99 lbs/ton processed, Honda's Emission Test 2009);

CAP = Hooding Capture Efficiency, (based on Honda's best estimate on hooding capture of 99.0%, (0.990)); and

MMR = Maximum tons processed per 12-months (57,320, Honda's Emission Activity Form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(5), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

i. Emission Limitation:

Visible PE shall not exceed opacity, as a 6-minute average, from any baghouse stack nor 20% opacity from any roof vent serving this emission unit.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing on the baghouse vents to demonstrate compliance with the above combined allowable particulate emission limitations from this emission unit as well as the other emission units whose captures particulate emissions are vented to baghouses BH-4 and BH-6 and the CO emissions from this emission unit.
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable CO emission limitations.
  - c. The emission testing shall be conducted to demonstrate compliance with the particulate emissions rate limitation of 0.005 grains/dscf, from any dust collectors or stacks associated with this emissions unit.
  - d. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A
    - ii. CO: Methods 1-4, and 10 of 40 CFR Part 60, Appendix A
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

g) Miscellaneous Requirements

- (1) None.

**8. P024, LPDC Heat Treat Operation**

**Operations, Property and/or Equipment Description:**

LPDC Heat Treat 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) and (PTI 05-12461)	The emissions from this emissions unit shall not exceed:  0.10 lb Particulate Emissions (PE)/hr; 1.12 lb Carbon Monoxide(CO)/hr; 1.33 lb Nitrous Oxides(NOx)/hr; 0.008 lb Sulfur Oxides(SOx)/hr and 0.073 lb Organic Compounds (OC)/hr.  Visible emissions from the stack shall not exceed 10% Opacity, as a six minute average.  The permittee shall burn only natural gas in this emissions unit.  See Sections c)(1), d)(1), e)(1), f)(1)a. thru e. and f)(1)g., below.
b.	OAC 3745-17-07 (A)(1)	The visible emission limitation specified by this rule is less stringent than the OC limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)(1)	The particulate emission limitation specified by this rule is less stringent than the OC limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. none.

c) Operational Restrictions

(1) The maximum throughput for (P024) LPDC Heat Treatment Furnace shall not exceed 2.8<sup>1</sup> tons of aluminum castings per hour.

<sup>1</sup> 2.8 tons of aluminum castings per hour represent the maximum designed capacity of the equipment.

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

d) Monitoring and/or Recordkeeping Requirements

(1) For each day during which the permittee burns a fuel other than natural gas in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. Each day when a fuel other than natural gas and/or operation emissions were burned in the this emissions unit

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation(s) in section b)(1) of this permit shall be determined in accordance with the following methods:

a. Emission Limitation:

0.10 pounds of particulate emissions (PE) per hour

The above limitation is based on the following equation:

$$\text{AER} = (\text{BBTU}) \times (1/\text{BCONV}) \times (\text{COEF})$$

Where:

AER= Allowable Emission Rate, in pounds per hour;

BBTU = Burner BTU/hr, (13,600,000 BTU/hr);

BCONV = BTU to scf conversion factor, (1020 BTU/scf); and

COEF = CO Emission Factor (7.6 lb PM/10<sup>6</sup> scf\*).

\*Based on AP-42, Version 5, Table 1.4-2, July, 1998 edition

Applicable Compliance Method:

Compliance shall be based on the use of natural gas as fuel. Any changes in fuel usage as well as compliance shall be based on the record keeping requirements under section d)(1) of this permit.

PE emissions are generated solely by the combustion of natural gas. These limits represent the maximum capacity of the burners. Since these limits reflect the potential emissions of the burners, no additional compliance determination is required.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

1.12 pounds of Carbon monoxide (CO) per hour

The above limitation is based on the following equation:

$$\text{AER} = (\text{BBTU}) \times (1/\text{BCONV}) \times (\text{COEF})$$

Where:

AER= Allowable Emission Rate, in pounds per hour;

BBTU = Burner BTU/hr (13,600,000 BTU/hr)

BCONV = BTU to scf conversion factor (1020 BTU/scf)

COEF = CO Emission Factor (84.0 lbs CO/10<sup>6</sup> scf\*)

\*Based on AP-42 Version 5, Table 1.4-1, July, 1998 edition

Applicable Compliance Method:

Compliance shall be based on the use of natural gas as fuel. Any changes in fuel usage as well as compliance shall be based on the record keeping requirements under section d)(1) of this permit.

CO emissions are generated solely by the combustion of natural gas. These limits represent the maximum capacity of the burners. Since these limits reflect the potential emissions of the burners, no additional compliance determination is required.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

1.33 pounds of nitrogen oxides (NOx) per hour

The above limitation is based on the following equation:

$$\text{AER} = (\text{BBTU}) \times (1/\text{BCONV}) \times (\text{NOxEF})$$

Where:

AER= Allowable Emission Rate, in pounds per hour;

BBTU = Burner BTU/hr (13,600,000 BTU/hr)

BCONV = BTU to scf conversion factor (1020 BTU/scf)

NOxEF = NOx Emission Factor (100 lb NOx/10<sup>6</sup> scf)(AP-42 Version 5. Table 1.4-1, 7/98)

Applicable Compliance Method:

Compliance shall be based on the use of natural gas as fuel. Any changes in fuel usage as well as compliance shall be based on the record keeping requirements under section d)(1) of this permit.

NOx emissions are generated solely by the combustion of natural gas. These limits represent the maximum capacity of the burners. Since these limits reflect the potential emissions of the burners, no additional compliance determination is required.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

0.008 pounds of sulfur oxides per hour

The above limitation is based on the following equation:

$$\text{AER} = (\text{BBTU}) \times (1/\text{BCONV}) \times (\text{SO} \times \text{EF})$$

Where:

AER= Allowable Emission Rate, in pounds per hour;

BBTU = Burner BTU/hr (13,600,000 BTU/hr)

BCONV = BTU to scf conversion factor (1020 BTU/scf)

SO x EF = SOx Emission Factor (0.6 lb SOx/10<sup>6</sup> scf)(AP-42 Version 5. Table 1.4-2, 7/98)

Applicable Compliance Method:

Compliance shall be based on the use of natural gas as fuel. Any changes in fuel usage as well as compliance shall be based on the record keeping requirements under section d)(1) of this permit.

SOx emissions are generated solely by the combustion of natural gas. These limits represent the maximum capacity of the burners. Since these limits reflect the potential emissions of the burners, no additional compliance determination is required.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

0.073 pounds of organic compounds (OC) per hour

The above limitation is based on the following equation:

$$\text{AER} = (\text{BBTU}) \times (1/\text{BCONV}) \times (\text{OCEF})$$

Where:

AER= Allowable emission rate

BBTU = Burner BTU/hr (13,600,000 BTU/hr)

BCONV = BTU to scf conversion factor (1020 BTU/scf)

OCEF = OC Emission Factor (5.5 lb OC/10<sup>6</sup> scf)(AP-42 Version 5. Table 1.4-2, 7/98)

Applicable Compliance Method:

Compliance shall be based on the use of natural gas as fuel. Any changes in fuel usage as well as compliance shall be based on the record keeping requirements under section d)(1) of this permit.

OC emissions are generated solely by the combustion of natural gas. These limits represent the maximum capacity of the burners. Since these limits reflect the potential emissions of the burners, no additional compliance determination is required.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

Visible emissions from the stack shall not exceed 10% Opacity, as a six minute average.

Applicable Compliance Method:

When requested, the permittee shall demonstrate compliance through visible emission observations performed in accordance U.S. EPA Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**9. P025, Aluminum LPDC Core Making Operations**

**Operations, Property and/or Equipment Description:**

Aluminum LPDC Core Making Operations

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

(1) b)(1)d., d)(2), d)(3), d)(4), d)(5), and e)(1).

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) and (PTI 05-14401)	Emissions from this emissions unit shall not exceed the following:  2.62 lb/hr and 11.47 tons/yr of particulate emissions (PE); 5.83 lb/hr and 25.5 tons/yr of Ammonia; and 0.3 lb/hr and 1.32 tons/yr of volatile organic compound (VOC).  10% Opacity, as a six minute average, from the stack.
b.	OAC 3745-17-07 (A)(1)	The visible emission limitation specified by this rule is less stringent than the OC limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)(1)	The particulate emission limitation specified by this rule is less stringent than the OC limitation established pursuant to OAC rule 3745-31-05(A)(3).

d.	OAC rule 3745-114-01 Bio Toxic Rule	<p>In order to demonstrate compliance with the [Toxic Air Contaminant Statute], the Director has established, per ORC 3704.03(F)(4)(c), a limit for ammonia, which shall not exceed 139.92 pound(s) per day.</p> <p>This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).</p>
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(2) Additional Terms and Conditions

a. The hourly PE, Ammonia and OC limits were established at maximum designed usage and production, and was used to establish compliance with the Toxics Policy. Therefore no recordkeeping is necessary to determine compliance with this limit.

[Authority for term: 3745-31-05(A)(3) and PTI 05-14401]

b. The permittee may vary the types of sand used so long as the ammonia emission rate from the sand does not exceed the limitations listed in section d)(1).

[Authority for term: 3745-31-05(A)(3) and PTI 05-14401]

c. The resin coated sand used in this process contains various amounts of phenol and formaldehyde. Emissions of these pollutants are presumed to be "0" (zero) based on information from the manufacturer.

[Authority for term: 3745-31-05(A)(3) and PTI 05-14401]

c) Operational Restrictions

(1) The LPDC Core Making Machines resin coated sand throughput shall not exceed 5206 pounds of resin coated sand per hour.

Compliance with this limit shall be determined by the following calculation:

(Core Weight (by core type) x (Maximum Cores per Hour (per machine)) x (Number of Machines) = Maximum Sand Usage.

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

d) Monitoring and/or Recordkeeping Requirements

(1) Permittee shall maintain monthly records of the following information:

a. The total resin coated sand throughput for each month;

- b. The annual, 12-month summation of the resin coated sand throughput; and
- c. The maximum calculated process rate of sand per hour\*.

\*(No hourly recordkeeping required, calculated process rate limits hourly mass of sand used.)

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

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

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

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

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

Toxic Contaminant: Ammonia;

TLV (mg/m<sup>3</sup>): 17.41 mg/m<sup>3</sup>;

Maximum Hourly Emission Rate (lbs/hr): 5.83;

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 208.3 ug/m<sup>3</sup>;  
and

MAGLC (ug/m<sup>3</sup>): 414.5

The permittee, having demonstrated that emissions of ammonia, from emissions unit, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. 5206 pounds of resin coated sand per hour; and/or
  - b. any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC; and any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that demonstrate compliance with the "toxic Air Contaminant Statute".

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], [OAC rule 3745-77-07(A)(3)(c) and [ORC 3704.03(F)].

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in section b)(1) of this permit shall be determined in accordance with the following methods:

- a. Emission Limitation:

2.62 pounds of particulate emissions (PE) per hour

The above limitation is based on the following equation:

$$HER = (MSUR/2000) \times PEER$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

MSUR = Maximum Sand Usage Rate (5206 pounds of sand per hour, based on the maximum calculated process rate of sand per hour); and

PEER=the PE Emission rate (1.0 lb PE/ton of sand, based on 01/26/99 Emission Test of AEP source P025).

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements under section d)(1) of this permit and stack test requirements under section f)(2), of this terms and conditions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation

5.83 pounds of Ammonia per hour

The above limitation is based on the following equation:

Hourly Emission Rate= (MSUR/2000) x AER

Where:

MSUR = Maximum Sand Usage Rate (5206 pounds of sand per hour, based on the maximum calculated process rate of sand per hour); and

AER =the Ammonia Emission rate (2.24 lb Ammonia/ton of sand, based on information provided by the resin coated sand supplier).

Applicable Compliance Method:

Compliance shall be based on the record keeping requirements under section d)(1) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

0.36 pounds of volatile organic compound (VOC) per hour.

The above limitation is based on the following equation:

HER = (PSU) x (PSOC) x (Density)

Where:

HER = Hour Emission Rate, in pounds per hour;

PSU = Parting Spray Usage, maximum usage in gallons per hour, (1.45 gallons per hour);

PSOC = Parting Spray Organic Content, in percent by volume (3%);

Density = Density of Parting Spray (8.26 lb / gallon).

Applicable Compliance Method:

Compliance shall be based on the assumptions that: 1.45 gallons per hour is the maximum amount of parting spray (mold release); only 3% of the “parting spray” is volatile organic compounds (VOC); and that the density of the VOC material in the “parting spray” is not greater than 8.26 pounds per gallon.

Prior to modifying this operations is such a manner that would cause an increase in the potential hourly emissions and/or the above assumptions are found to be in error, this facility shall apply for and obtain all appropriate air pollution permits to proper address the emission increases in as timely manner as possible and in accordance with all applicable air pollution rule and regulations.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**10. P034, 2500-Ton Forging Press**

**Operations, Property and/or Equipment Description:**

2500-Ton Forging Press

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

(1) b)(1)b., d)(2), and e)(2).

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) and (PTI 05-12997)	1.16 lb of particulate emissions (PE) /hr and 0.03 grains/dscf  6.18 lbs of organic compound (OC)/hr.
b.	OAC rule 3745-31-05(E) (State Enforceable only)	15.78 tons of OC per year.  See Sections d)(1), and e)(2)
c.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3)
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3)

(2) Additional Terms and Conditions

a. Visible particulate emissions from the stack serving this emissions unit shall not exceed zero percent (0%) opacity as a six-minute average.

[OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

(1) This emissions unit shall be equipped with a mist eliminator to control PE emissions.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-12997]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each calendar year the emission unit is in operation:
- a. the company identification for each coating material employed;
  - b. the amount of coating material(s) employed, in gallons;
  - c. the organic compound content of coating material(s) employed, in pounds per gallon;
  - d. the total organic compound emissions from the coating materials employed, in tons per calendar year, (the sum of: [(“b” x “c”)/2000]).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-12997]

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-31-05(A)(3)] or if TV [OAC rule 3745-77-07(A)(3)]

- (3) The permittee shall properly maintain the mist eliminator when the emissions unit is in operation. The mist eliminator shall be maintained in accordance with the manufacturer’s recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions unit is in operation:
- a. a log (date and total time) of the downtime or bypass of the mist eliminator, and/or downtime of the mist eliminator, when the associated emissions unit(s) was/were in operation.

These records shall be maintained at the facility for a period of five years.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. each period of time (start time and date, and end time and date) when the mist eliminator was not employed while this emissions unit was operating; and/or
  - b. Visible particulate emissions from the stack serving this emissions unit exceeds zero percent (0%) opacity as a six-minute average.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(A)(3)(c) and [ORC 3704.03(F)].

- (2) The permittee shall submit annual deviation (excursion) reports that identify the following:
- a. 15.78 tons of OC per year.

The annual deviation (excursion) reports shall be submitted by April 30<sup>th</sup> each calendar year and shall cover the annual emissions of the previous calendar year.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-12997]

- (3) The permittee shall submit semiannual written reports that:
- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-12997]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) in section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

1.16 lb of particulate emissions (PE)/hour and 0.03 grains/dscf

The above limitation is based on the following equation:

$$\text{HER} = (\text{PCEF}) \times (\text{EFF}) \times (\text{TCONV}) \times (\text{GCONV})$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

PCEF = the Particulate Control Exhaust Flow rate (Maximum 4500 acfm based on specifications from Manufacturer.);

EFF = the Particulate Control Exhaust Efficiency (0.03 grains/dscf) based on design specifications from the manufacturer.

TCONV = Time Conversion Factor (60 minutes/hour).

GCONV = Grain Conversion Factor (1 lb/7,000 grains)

(No hourly recordkeeping required. Limits based on the maximum designed capacity of the equipment.)

Applicable Compliance Method:

Compliance shall be based on: the maximum exhaust flow rate of the mist collector being at 4500 actual cubic feet per minute; the exhaust particulate concentration in the exhaust being no greater than 0.03 grains per dry standard cubic feet; and the record keeping and reporting requirements under sections d)(5) and e)(1)c., of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-12997]

b. Emission Limitation:

6.18 lb of OC/hr, based on daily average

The above limitation is based on the following equation:

$$\text{HER} = \text{SER} + \text{LER} + \text{BER}$$

Where:

HER = Hourly Emissions Rate, in pounds per hour;

SER<sup>1</sup> = Solvent Emission Rate from the binder, in pounds per hour (based on a daily average);

LER<sup>2</sup> = Lubricant Emission Rate, in pounds per hour (based on a daily average);  
and

BER<sup>3</sup> = Bonder lube Emission Rate, in pounds per hour (based on a daily average).

<sup>1</sup>Where:

$$\text{SER} = \frac{[(\text{DU}) \times (\text{DEN}) \times (\text{VOL})]}{(\text{HPD})}$$

DU= Daily Usage of solvent per day (15 gallons per day);

DEN = Density of material (6.59 lbs per gallon based on MSDS);

VOL = Percent Volatile of the material (100 % based on MSDS); and

HPD = Hours Per Day of operation (24 hours per day).

<sup>2</sup>Where:

$$\text{LER} = \frac{[(\text{DU}) \times (\text{DEN}) \times (\text{VOL})]}{(\text{HPD})}$$

DU= Daily Usage of Lubricant per day (2 gallons per day);

DEN = Density of material (7.84 lbs per gallon based on MSDS);

VOL = Percent Volatile of the material (88 % based on MSDS); and

HPD = Hours Per Day of operation (24 hours per day).

<sup>3</sup>Where:

$$\text{BER} = \frac{[(\text{DU}) \times (\text{DEN}) \times (\text{VOL})]}{(\text{HPD})}$$

DU= Daily Usage of Bonder lube per day (12 gallons per day);

DEN = Density of material (8.5 lbs per gallon based on estimate of material to be used);

VOL = Percent Volatile of the material (35% based on estimate of material to be used); and

HPD = Hours Per Day of operation (24 hours per day).

**Applicable Compliance Method:**

Compliance shall be based on the information provided by the applicant in PTI 05-12997. As part of the BAT determination the OC emissions are limited to not exceed 6.18 pounds per hour and 15.78 tons per year, regardless of the use of photochemically reactive materials or not. Compliance with the hourly limit shall be based on the assumptions in the PTI that the hourly emissions rate represents the maximum potential of this emissions unit. Any changes in the operations and/or determinations of errors in the above assumed maximums that increase the hourly potential will need to be address under appropriate permit review.

Compliance with the 15.78 tons of OC per year shall be based on the record keeping and the reporting under sections d)(2) and e)(2), respectively.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-12997]

c. Emission Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed zero percent (0%) opacity as a six-minute average.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) None.

**11. P075, Continuous Shotblast System #1**

**Operations, Property and/or Equipment Description:**

Continuous Shotblast System #1

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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(D) (to avoid becoming PSD major facility)	The particulate emissions (PE) from baghouse # 6, which controls emissions from emissions unit P075, emissions unit P018, Rough Finish, and emissions unit P020, Line 1 Didion, shall not exceed 12.15 tons (PE)/ rolling 12-month period.  The fugitive emissions from P075 shall not exceed 0.52 tons of PE/ rolling 12-month period.
b.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.
c.	OAC rule 3745-17-11(B)(1) Figure II curve P-1	The PE emissions shall not exceed 24.54 lbs. per hour.
d.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	See Sections b)(2)a., thru d., c)(1) and (2), d)(1) thru (3), e)(1), f)(1)b., and f)(2), below.
e.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)e., below.

f.	40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)	The permittee shall comply with the applicable emission limitations(s) as specified in 40 CFR Part 63, Subpart ZZZZZ, (Iron and Steel Foundries Area Sources), in accordance with 40 CFR Parts 63.10895.  Should Subpart ZZZZZ be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.
g.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(4), below.

(2) Additional Terms and Conditions

a. This permit for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

b. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

c. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control devise associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI P0105716]

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still

exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

- e. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions from this emissions unit since the potential emissions are less than ten tons per year.

c) Operational Restrictions

- (1) The maximum operating hours for emissions units P075 shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

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

- (2) The maximum amount of metal processed through emissions units P075 shall not exceed 60,627 tons per rolling 12-month period.

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

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the total operating hours;
- b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
- c. the hours that baghouse # 6 was operated;
- d. the particulate emissions (PE) rate from baghouse # 6, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse #6, in tons, (the summation of:  $(\{[("d" \times 78,719 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a"} / 2,000 \text{ lbs/ton})$ ); and
- f. the rolling, 12-month total PE from baghouse # 6. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:
- a. the amount of metal processed in emissions unit P075, in tons;
  - b. the rolling, 12-month total metal processed in emissions unit P075. The rolling, 12-month summation of the total metal employed (the total amount of metal employed for the current month ( "a") plus the total amount of metal employed for the 11 previous calendar months);
  - c. the monthly fugitive PE emissions, in tons, (the summation of: {[metal processed "a" x 17.0 lbs of PE/ton of metal employed, from Fire SCC 304000340,) x (1-hooding capture efficiency ( 99.0%), best engineering assumption)]/ 2000 lbs/ton}; and
  - d. the rolling, 12-month total fugitive PE from P075. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month ( "c") plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and

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

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

(5) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the combined rolling, 12-month period PE limitation of 12.15 tons from baghouse # 6, (emissions from emissions unit P018, emissions unit P075, Line 1 Shotblast, and emissions unit P020, Line 1 Didion,);
- b. all exceedances of the rolling 12-month period metal processed of 60,627 tons per rolling 12-month period in emissions unit P075;
- c. all exceedances of the rolling 12-month period fugitive PE limitation of 0.52 tons per rolling 12-month period from emissions unit P075;
- d. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and/or
- e. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

(2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

(3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

24.54 lbs of PE/hr

The hourly emission limitation was established by the following methodology:

$HER = 0.5782 \times (U \text{ to the power of } 0.6458)$

Where:

HER = particulate emissions, in lbs/hr;

U = Uncontrolled particulate emissions, in lbs/hr (Fire, SCC 304000340, emission factor of , 17.0 lbs emitted/ton processed multiplied by 19.5 tons/hr maximum production).

Emission calculation is based on the requirements of OAC rule 3745-17-11(B)(1) Figure II, curve P-1.

Applicable Compliance Method:

Compliance with the above limitations is based on the 19.5 tons of metal processed being the maximum potential process rate for this emissions unit and emission testing demonstrating 0.005 grains/ dscf requirement.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 6, which controls emissions from emissions unit P075, emissions unit P018, Rough Finish, and emissions unit P020, Line 1 Didion, shall not exceed 12.15 tons/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$AER = [(Af \times Ef \times 60 \text{ mins/hr} \times Cf) \times Ho] / 2000$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse#6, in acfm, (78,719, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P075, shall not exceed 0.52 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$FER = [(MSR \times Ef) \times (1-CAP)] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum metal processed rate, in tons, (60,627 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (17.0 lbs/ton of metal charged, Fire SCC 304000340); and

CAP = Assumed capture efficiency, in %, (99.9% (0.999), from data provided by Honda).

Applicable Compliance Method:

Compliance is based on the maintenance and upkeep of the hooding and duct work of this emissions unit and the recordkeeping under section d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for on any and all baghouses that this emissions unit is controlled by to demonstrate compliance with the allowable PE limitations.

a. The emission testing shall be conducted within 1 year prior to the expiration of permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

g) Miscellaneous Requirements

- (1) None.

**12. P076, Sand Recycling and Preparation System**

**Operations, Property and/or Equipment Description:**

sand recycling and preparation system w/conveyors, silos, screens, cooling unit, bucket elevators, and muller, controlled by baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	<p>The use of a building enclosure along with a baghouse control system, which has a maximum emission rate of 0.005 grains of particulate emissions (PE) per dry standard cubic feet (dscf).</p> <p>The volatile organic compound (VOC)/ organic compound (OC) emissions shall not exceed 0.88 pounds per hour.</p> <p>Emissions from the use of natural gas shall not exceed the following:</p> <p>0.008 lbs/hr and 0.03 tons/yr PE and PM10;            0.084 lbs/hr and 0.37 tons/yr CO;            0.1 lbs/hr and 0.44 tons/yr NOx;            0.006 lbs/hr and 0.03 tons/yr OC (VOC);            and            0.001 lbs/hr and 0.004 tons/yr SO2.</p> <p>The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-05(D).</p>
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.

c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	<p>The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.</p> <p>The fugitive emissions from P076 shall not exceed 0.35 tons of PE/rolling 12-month period.</p> <p>The VOC (OC) emissions shall not exceed 3.85 tons/ 12-month period, based on a rolling, 12-month summation.</p>
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-10 (from the combustion of natural gas)	Particulate emissions (PE) shall not exceed 0.020 pounds per million BTU of actual heat input.
f.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.
g.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See section d)(4), below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

- b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

- c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC paragraph 3745-31-05(A)(3), as effective 11/30/01]

- d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC paragraph 3745-31-05(A)(3), as effective 11/30/01]

- e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC paragraph 3745-31-05(A)(3), as effective 11/30/01]

c) Operational Restrictions

- (1) The maximum operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

The permittee has existing records of the 12-month rolling operating hours; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

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

- (2) The maximum amount of sand processed through this emissions unit shall not exceed 657,000 tons per rolling 12-month period.

The permittee has existing records of the 12-month rolling on the amount of metal processed; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

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

(3) Fuel usage in this emission unit shall be only natural gas.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

- a. the total operating hours;
- b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
- c. the hours that baghouse # 7 was operated;
- d. the particulate emissions (PE) rate from baghouse #7, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse #7, in tons, (the summation of:  $\{[("d" \times 89,655 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a"\} / 2,000 \text{ lbs/ton}$ );
- f. the rolling, 12-month total PE from baghouse #7. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain monthly records of the following information:

- a. the amount of sand employed in this emissions unit, in tons;
- b. the rolling, 12-month total sand usage in this emissions unit. The rolling, 12-month summation of the total sand employed (the total amount of sand employed for the current month ("a") plus the total amount of sand employed for the 11 previous calendar months);
- c. the monthly fugitive PE emissions, in tons, (the summation of:  $\{[(\text{sand usage "a"} \times 3.6 \text{ lbs of PE/ton of sand employed, from Fire SCC 304000350,}) \times (1 - \text{hooding capture efficiency (99.9\%, best engineering assumption)})] / 2000 \text{ lbs/ton}$ }; and
- d. the rolling, 12-month total fugitive PE from this emissions unit. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month (c) plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain monthly records of the following information:
- a. the total operating hours; and
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions..

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

- (5) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall maintain daily records during which fuel other than natural gas was employed in the burners associated with this emissions unit. The records shall list the type and quantity of fuel employed.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the combined particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911 of 13.83 tons (PE)/ rolling 12-month period;
  - b. all exceedances of the rolling 12-month period sand usage of 657,000 tons per rolling 12-month period in this emissions unit;
  - c. all exceedances of the rolling 12-month period fugitive PE limitation of 0.35 tons per rolling 12-month period from this emissions unit;
  - d. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and
  - e. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 7, in acfm, (89,655, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation

The fugitive particulate emissions (PE) from emissions unit P076, shall not exceed 0.35 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$\text{FER} = [(\text{MSP} \times \text{E}_f) \times (1 - \text{CAP}) \times (1 - \text{C}_b)] / 2000 \text{ lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSP = Maximum sand processed rate, in tons, (657,000 tons, from the data provide by Honda);

E<sub>f</sub> = Emission factor, in lbs of PE/ton of sand, (3.6 lbs/ton of sand, Fire SCC 30400350); and

CAP = Assumed capture efficiency, in %, (99.9), from data provided by Honda).

C<sub>b</sub>% = Capture/Control of Building (70% from Honda Calculation sheets and best engineering estimate)(Reference: April 10, 1998 Letter to Iron ton Iron, Inc from Stephen Giles, Director of Portsmouth Local Air Agency).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

0.88 pounds of VOC (OC) per hour

Applicable Compliance Method:

The above emission rate is based on Honda's information and constitutes the best available estimate at this time. If in the future more accurate data becomes available the regulatory requirements from OC (VOC) emission from this emission unit may need to be reevaluated.

When requested, The permittee shall demonstrate compliance with the VOC (OC) limitations based upon the results of emission testing conducted in accordance with the following: Methods 1-4, and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

3.85 tons of VOC per year

$$\text{AER} = (0.88 \text{ lbs of VOC(OC)/hr} \times 8760 \text{ hr/yr}) / 2000 \text{ lbs/ton}$$

Applicable Compliance Method:

The above calculation is based on Honda's information and constitutes the best available estimate at this time. If in the future if more accurate data becomes available the regulatory requirements from VOC (OC) emission from this emission unit may need to be reevaluated.

When requested, The permittee shall demonstrate compliance with the VOC (OC) limitations based upon the results of emission testing conducted in accordance with OC: Methods 1-4, and 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitations:

Emissions from the use of natural gas:

0.008 lbs/hr and 0.03 tons/yr PE and PM10;

0.084 lbs/hr and 0.37 tons/yr CO;

0.1 lbs/hr and 0.44 tons/yr NOx;

0.006 lbs/hr and 0.03 tons/yr OC (VOC); and

0.001 lbs/hr and 0.004 tons/yr SO2.

Emission determined by multiplying the AP-42 emission factors of 100 lb/mmcf for NOx, 84 lb/mmcf for CO, 7.6 lb/mmcf for PE, 0.6 lb/mmcf for SO2, and 5.5 lb/mmcf for VOC (Tables 1.4-1 and 1.4-2 (8/98)) by the hourly gas usage (100 cf/hr), and multiplying by 8760 hrs/yr and multiplying by a conversion factor of 1 ton/2000 lbs.

Applicable Compliance Method:

Compliance is assumed based on the use of natural gas and the record keeping and reporting requirements under sections d)(6) and e)(3), of this permit.

g. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
- a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**13. P080, FC Line #4 Shotblast Machine**

**Operations, Property and/or Equipment Description:**

FC Line #4 Shotblast Machine

- 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) and (PTI 05-13485)	<p>Particulate emissions (PE) shall not exceed 2.34 pounds per hour from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.</p> <p>Fugitive PE shall not exceed 0.05 lb/hr, from emissions unit P080 only</p> <p>Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.</p> <p>Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.</p>
b.	OAC rule 3745-31-05(D) (to avoid facility becoming a PSD major facility)	Fugitive PE shall not exceed 0.12 ton per rolling, 12-month summation for emissions unit P080 only.
c.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-07(B)(1)	<p>Compliance with existing rule has been determined to constitute BAT for this emissions unit.</p> <p>See section b)(1)a, above.</p>

e.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(4), below.

(2) Additional Terms and Conditions

- a. The hourly emissions limitations specified above represent the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-13485]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (2) This emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.004 grains of particulate (PE) emissions per dry standard cubic feet (dscf).

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (3) The maximum annual iron throughput shall not exceed 15,432 tons, based on a rolling, 12-month summation.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. the iron throughput for each month, in tons; and
- b. the rolling, 12-month summation of iron throughput, in tons, (the summation of the iron throughput for the current month, plus the total iron throughput for the previous 11 calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (3) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse did not comply with the allowable range;
  - b. annual iron throughput shall not exceed 15,432 tons, based on a rolling, 12-month summation; and/or
  - c. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

- (1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitation:

2.34 lb PE/hr and 0.004 gr/dscf, from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = (BFR)(AV)(BEF)(TI)(CONV)$$

Where:

HER = Hour Emissions Rate, in pounds per hour;

BFR = baghouse flow rate (65,000 acfm);

AV = the air variability factor (105%);

BEF = baghouse efficiency (0.004 grain of PE/dscf);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing under section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

b. Emission Limitation:

Fugitive PE shall not exceed 0.05 lb/hr, from emissions unit P080 only

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = (MMR)(2.2046 \text{ lbs/kg})(PMER)(1 \text{ ton}/2000 \text{ lbs})(1-CAP)$$

Where:

HER = Hourly Emissions Rate, in pounds per hour;

PMER = PE rate (15.5 lb of PE/ton of metal)\*;

MMR = maximum metal (iron throughput) rate (3,086 kg/hr); and

CAP = control device capture efficiency (99.9%).

\*Reference obtained from American Foundry Society, Modern Casting, dated January 1972.

Applicable Compliance Method:

Compliance shall be based on the maximum capacity of 1,543 kg/hr (1.7 tons/hr) and the hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse as required in Section c)(1), in this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

c. Emission Limitations:

Fugitive PE shall not exceed 0.12 ton per rolling, 12-month summation for emissions unit P080 only

The annual emissions limitation was established by the following methodology:

$$AER = \{[(MMR) \times (2.2046 \text{ lbs/kg}) \times (PMER)] \times (1-CAP)\} / 2000$$

Where:

AER = Annual Emission Rate, in tons per rolling, 12 month period

PMER = PE rate (15.5 lb of PE/ton of metal)\*;

MMR = maximum metal (iron throughput) rate of 14,000,000 kg/yr (15,432 tons); and

CAP = control device capture efficiency (99.9%).

Applicable Compliance Method:

Compliance shall be based on the record keeping in section d)(1) of this permit and the hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse as required in Section c)(1), in this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

d. Visible Emission Limitations:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirement established in section d) of this permit

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

e. Visible Emission Limitations:

Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirement established in section d) of this permit

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

(2) The permittee shall conduct, or have conducted, emission testing for the baghouse to demonstrate compliance with the allowable PE limitations:

a. The emission testing shall be conducted within 1 year prior to the expiration of permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations, 2.34 pound per hour and 0.004 grains per dry standard cubic feet.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while emissions unit's P078, P079, P080, P081, P082, P083, P089, and P090 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

g) Miscellaneous Requirements

(1) None.

**14. P083, FC Line #4 Autopour System**

**Operations, Property and/or Equipment Description:**

FC Line #4 Autopour System

- 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) and (PTI 05-13485)	Particulate emissions (PE) shall not exceed 2.34 pounds per hour from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.  Fugitive PE shall not exceed 0.22 lb/hr, from emissions unit P083 only  Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.  Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.  See Sections b)(2)a., c)(1), c)(2), d)(2), d)(3), d)(4), e)(1), e)(2), f)(1)a., f)(1)b., f)(1)d., and f)(2), below.
b.	OAC rule 3745-31-05(D) (to avoid facility becoming a PSD major facility)	Fugitive PE shall not exceed 0.51 ton per rolling, 12-month summation for emissions unit P083 only.  See Sections c)(3), d)(1), e)(1), and f)(1)c., below.

c.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-07(B)(1)	Compliance with existing rule has been determined to constitute BAT for this emissions unit.  See section b)(1)a, above.
e.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The hourly emissions limitations specified above represent the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-13485]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (2) This emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.004 grains of particulate (PE) emissions per dry standard cubic feet (dscf).

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (3) The maximum annual iron throughput shall not exceed 15,432 tons, based on a rolling, 12-month summation.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the iron throughput for each month, in tons; and
  - b. the rolling, 12-month summation of iron throughput, in tons, (the summation of the iron throughput for the current month, plus the total iron throughput for the previous 11 calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (3) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible

emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse did not comply with the allowable range; and/or
- b. annual iron throughput shall not exceed 15,432 tons, based on a rolling, 12-month summation

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)].

(2) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
- b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
- c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

f) Testing Requirements

(1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

2.34 lb PE/hr and 0.004 gr/dscf, from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{HER} = (\text{BFR})(\text{AV})(\text{BEF})(\text{TI})(\text{CONV})$$

Where:

HER = Hour Emissions Rate, in pounds per hour;

BFR = baghouse flow rate (65,000 acfm);

AV = the air variability factor (105%);

BEF = baghouse efficiency (0.004 grain of PE/dscf);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing under section f(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

b. Emission Limitation:

Fugitive PE shall not exceed 0.22 lb/hr, from emissions unit P083 only

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{HER} = \text{PER} + \text{HFER}$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

PER = Pouring Emission Rate<sup>1</sup>, in pounds per hour; and

HFER = Holding Furnace Emissions Rate<sup>2</sup>, in pounds per hour.

$${}^1\text{PER} = (\text{MMR}) \times (2.2046 \text{ lbs/kg}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (\text{PMER}) \times (1 - \text{CAP})$$

Where:

MMR = maximum metal (iron throughput) rate of 3,086 kg/hr (3.4 tons/hr), 14,000,000 kg/yr (15,432.2 tons/yr);

PMER = the PE rate (2.06 lbs of PE/ton of metal)\*; and

CAP = control device capture efficiency (99%)\*\*.

\* Emission factor reference provided by Honda.

\*\* 99% of the PE from this source are controlled by the baghouse, 1% escapes as fugitive PE.

$${}^2\text{HFER} = (\text{MMR}) \times (2.2046 \text{ lbs/kg}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (\text{PMER}) \times (1-\text{CAP})$$

Where:

MMR = maximum metal (iron throughput) rate of 3,086 kg/hr;

PMER = the PE rate (0.86 lb of PE/ton of metal)\*; and

CAP = control device capture efficiency (95%)\*\*.

\* Emission factor reference obtained from U.S. EPA Fire database.

\*\* 95% of the PE from this source are controlled by the baghouse, 5% escapes as fugitive PE.

Applicable Compliance Method:

Compliance shall be based on the maximum capacity of 1,543 kg/hr (1.7 tons/hr) and the hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse as required in Section c)(1), in this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

c. Emission Limitations:

Fugitive PE shall not exceed 0.51 tons per rolling 12 month, period, from emissions unit P083 only

The rolling 12 month, period emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = \text{PER} + \text{HFER}$$

Where:

AER = Annual Emission Rate, in tons per rolling 12 month, period;

PER = Pouring Emission Rate<sup>1</sup>, in tons per rolling 12 month, period; and

HFER = Holding Furnace Emissions Rate<sup>2</sup>, in tons per rolling 12 month, period.

$${}^1\text{PER} = (\text{MMR}) \times (2.2046 \text{ lbs/kg}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (\text{PMER}) \times (1-\text{CAP})$$

Where:

MMR = maximum metal (iron throughput) rate of 14,000,000 kg/yr (15,432.2 tons/yr);

PMER = the PE rate (2.06 lbs of PE/ton of metal)\*; and

CAP = control device capture efficiency (99%)\*\*.

\* Emission factor reference provided by Honda.

\*\* 99% of the PE from this source are controlled by the baghouse, 1% escapes as fugitive PE.

$${}^2\text{HFER} = (\text{MMR}) \times (2.2046 \text{ lbs/kg}) \times (1 \text{ ton}/2000 \text{ lbs}) \times (\text{PMER}) \times (1-\text{CAP})$$

Where:

MMR = maximum metal (iron throughput) rate of 14,000,000 kg/yr (15,432.2 tons/yr);

PMER = the PE rate (0.86 lb of PE/ton of metal)\*; and

CAP = control device capture efficiency (95%)\*\*.

\* Emission factor reference obtained from U.S. EPA Fire database.

\*\* 95% of the PE from this source are controlled by the baghouse, 5% escapes as fugitive PE.

Applicable Compliance Method:

Compliance shall be based on the record keeping in Section d)(1) and the hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse as required in Section c)(1), in this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

d. Visible Emission Limitations:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirement established in section d) of this permit

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

e. Visible Emission Limitations:

Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.

Applicable Compliance Method:

Compliance shall be based on the record keeping requirement established in section d) of this permit

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

(2) The permittee shall conduct, or have conducted, emission testing for the baghouse to demonstrate compliance with the allowable PE limitations:

a. The emission testing shall be conducted within 1 year prior to the expiration of permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations, 2.34 pound per hour and 0.004 grains per dry standard cubic feet.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while emissions unit's P078, P079, P080, P081, P082, P083, P089, and P090 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

g) Miscellaneous Requirements

- (1) None.

**15. P084, Gas Soft Nitriding Furnace #3**

**Operations, Property and/or Equipment Description:**

Gas Soft Nitriding Furnace #3

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)(1), d)(2), d)(3), d)(4) and e)(1).

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)	Particulate emissions (PE) shall not exceed 0.13 pound per hour.  Nitrogen oxide (NOx) emissions shall not exceed 5.02 pounds per hour.  Carbon monoxide (CO) emissions shall not exceed 2.15 pounds per hour.  Organic compound (OC) emissions shall not exceed 1.45 pounds per hour.  Sulfur dioxide (SO2) emissions shall not exceed 0.0032 pound per hour.  Cyanide (CN) emissions shall not exceed 0.07 pound per hour.  Ammonia (NH3) emissions shall not exceed 5.0 pounds per hour.  Visible PE shall not exceed 20% opacity, as a 3-minute average, from any stack.  See Sections c)(1), d)(5), d)(6), e)(1), f)(1)a. thru f)(1)d., f)(1)f. thru f)(1)h., and f)(2), below.

b.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-18-06(E)(2)	The SO2 emissions limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-114-01	Ohio Toxics Rule  See Sections d)(1), d)(2), d)(3), d)(4) and e)(1), below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall burn only natural gas or propane in this emissions unit.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The application for this emissions unit, P084, was evaluated based on the actual materials and the design parameters of the emissions unit's(s) exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Ammonia;

TLV (mg/m3): 17.41 mg/m3;

Maximum Hourly Emission Rate (lbs/hr): 5.0;

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 100.5 ug/m3;  
and

MAGLC (ug/m3): 414.5

The permittee, has demonstrated that emissions of Ammonia, from emissions unit(s) P084, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (3) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (4) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-31-05(A)(3)] or if TV [OAC rule 3745-77-07(A)(3)]

- (6) For each day during which the permittee burns a fuel other than natural gas or propane in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. Each day when a fuel other than natural gas, propane, and/or operation emissions were burned in the this emissions unit
- b. Visible PE exceeds 20% opacity, as a 3-minute average, from any stack;
- c. any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute" ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration; or if no changes to the emissions, emissions unit(s), or the exhaust stack have been made, a statement to this effect;

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], [OAC rule 3745-77-07(A)(3)(c) and [ORC 3704.03(F)].

f) Testing Requirements

(1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.13 lb PE/hr

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12142, which was issued final on June 27, 2002.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- b. Emission Limitation:

2.15 lbs CO/hr

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12142, which was issued final on June 27, 2002.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

5.02 lbs NOx/hr

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12142, which was issued final on June 27, 2002.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

1.452 lbs OC/hr

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12142, which was issued final on June 27, 2002.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

0.003 lbs SO<sub>2</sub>/hr

The above limitation is based on the following equation:

$$\text{SER} = (\text{BBTU} \times 1/\text{BCONV} \times \text{EF})$$

Where:

SER = the maximum hourly SO<sub>2</sub> emission rate

BBTU = combined burner capacity BTU/hr (5,331,152 BTU/hr)

BCONV = BTU to scf conversion factor (1,020 BTU/scf)

EF = the SO<sub>2</sub> emission factor of 0.6 lb/mmcf, from AP-42, Table 1.4-2, 7/98

If required, the permittee shall demonstrate compliance with the hourly SO<sub>2</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

0.07 lbs CN/hr

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12142, which was issued final on June 27, 2002.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

5.0 lbs Ammonia (NH<sub>3</sub>)/hr

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12142, which was issued final on June 27, 2002.

[Authority for term: OAC rule 3745-77-07(C)(1)]

h. Emission Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent (20%) opacity as a three-minute average.

Applicable Compliance Method

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

[OAC rule 3745-31-05(A)(3)]

(2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements

- a. The emission testing shall be conducted within 1 year of permit issuance.

- b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate: particulate emissions (PE); nitrogen oxides (NOx); carbon monoxides (CO); organic compounds (OC); Cyanide (CN); Ammonia (NH3).
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.
  - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A;
  - ii. NOx: Method 7E 40 CFR Part 60, Appendix A;
  - iii. CO: Method 10 40 CFR Part 60, Appendix A;
  - iv. OC: Method(s) 18, 25, and/or 25A 40 CFR Part 60;
  - v. CN: Method 426 California Air Resources Board; and
  - vi. NH3: Modified Method CTM-027.

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

- d. The test(s) shall be conducted while operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**16. P087, FC Disk Core Machine**

**Operations, Property and/or Equipment Description:**

FC Disk Core Machine

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)(8), d)(9), d)(10), d)(11), and e)1)i.

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) (PTI 05-12593)	The emissions from this emissions unit shall not exceed:  0.21 lb of particulate emissions (PE) /hr (stack emissions)  0.001 lb of particulate emissions (PE)/hr (fugitive emissions)  1.82 lbs of organic compound (OC)/hr (stack emissions)  Visible PE shall not exceed 0% opacity, as a 3-minute average, from any stack.  20% opacity, as a three-minute average, from the fugitive dust source  See Sections b)(2)a. thru c., c)(1), c)(2), d)(1) thru (4), d)(7), e)(1), thru e)(3), f)(1)a., f)(1)c., f)(1)e., f)(1)f., f)(1)i., f)(1)j, and f)(2), below.
b.	OAC rule 3745-31-05(D) (To avoid becoming a major PSD facility.)	The particulate emissions (PE) from baghouse # 4, which controls emissions from emissions unit P020, emissions unit P902, Autopour I Furnace, and emissions unit P087, Disc M/C, shall not exceed 11.53 tons (PE)/ rolling 12-month period.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.76 ton of PE per rolling 12 months - (stack emissions)  0.03 ton of OC per year- (fugitive emissions)  0.003 ton PE per year- (fugitive emissions)  6.25 tons of OC per rolling 12 months- (stack emissions)  See Sections c)(3), c)(4), d)(5), d)(6), e)(1), f)(1)b., f)(1)d., f)(1)g., and f)(1)h., below.
c.	OAC rule 3745-17-07	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)(1)	The PE emission limitation specified by this rule is less stringent than the PE emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-17-07(B)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3)..
f.	OAC rule 3745-114-01	Ohio Toxic Rule  See Sections d)(8), d)(9), d)(10), d)(11), and e)1)i., below.

(2) Additional Terms and Conditions

- a. This permit for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- b. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- c. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a baghouse for eliminating and/or minimizing particulate emissions (PE).

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

- (2) This emissions unit shall be equipped with and operate a wet scrubber when employing triethylamine (TEA) in order to minimize and/or eliminate the release of organic compound (OC) emissions.

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

- (3) The maximum annual operating hours for P087 shall not exceed 7,200 hours per year, based upon a rolling, 12 month summation of the operating hours.

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

- (4) The maximum sand throughput for this emissions unit shall not exceed 5,100 tons per rolling, 12 months.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the hours that baghouse # 4 was operated;
  - b. the particulate emissions (PE) rate from baghouse # 4, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
  - c. the monthly PE from baghouse # 4, in tons, (the summation of:  $\{[( "b" \times 74,731 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a" \} / 2,000 \text{ lbs/ton}$ ); and

- d. the rolling, 12-month total PE from baghouse # 4. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("c") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) In order to maintain compliance with the applicable emission limitation(s), when employing triethylamine (TEA), the scrubber shall be maintained in accordance with the following standards:
  - a. The liquid flow rate shall not be less than 22 gallons per minute;
  - b. The pressure drop across the scrubber shall not be less than 0.5 inches of water; and
  - c. The pH of the scrubber liquor shall be maintained at or below 4.5.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain monthly records of the following information:
  - a. the total operating hours; and
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. the sand throughput for each month, in tons; and
  - b. the rolling, 12-month summation of sand throughput, in tons, (the summation of the sand throughput for the current month, plus the total sand throughput for the previous 11 calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log;
- (i) the color of the emissions;
  - (ii) the total duration of any visible emission incident; and
  - (iii) any corrective actions taken to eliminate the visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The PTI 05-12593 application for this emissions unit, P087, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
    - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices";  
or

- ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Pollutant: triethylamine

TLV (mg/m3): 1 ppm

Maximum Hourly Emission Rate (lbs/hr): 0.31

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 17.54

MAGLC (ug/m3): 98.54

The permittee, has demonstrated that emissions of Ammonia, from emissions unit(s) P087, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (10) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all exceedances of the combined rolling, 12-month period PE limitation of 11.53 tons from baghouse # 4, (emissions from emissions unit emissions unit P020, emissions unit P902, Autopour I Furnace, and emissions unit P087, Disc M/C.);
  - b. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range;
  - c. all periods of time in which this emissions unit, when employing triethylamine (TEA), was in operation and the scrubber was not maintained in accordance allowable range(s);
  - d. all exceedances of the rolling 12-month, period 7,200 operation hour limitation;
  - e. all exceedances of the rolling 12 month, period 5,100 tons throughput of sand limitation; and/or
  - f. any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration; or if no changes to the emissions, emissions unit(s), or the exhaust stack have been made, a statement to this effect;

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)].

- (2) When the scrubber is being employed, the permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber, the liquid flow rate, or the liquid pH was/were outside of the appropriate range or exceeded the applicable limit contained in 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 vented to the scrubber;
- c. each incident of deviation described in [a] or "b" (above) where a prompt investigation was not conducted;
- d. each incident of deviation described in [a] or "b" where prompt corrective action, that would bring the pressure drop, liquid flow rate, and/or scrubber liquid pH into compliance with the acceptable range, was determined to be necessary and was not taken; and
- e. each incident of deviation described in [a] or "b" 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.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)].

- (3) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
0.21 lb of particulate emissions (PE)/hour-(stack emissions) and  
0.005 gr./dscf.

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) of this permit based on the testing requirements that were outlined in Permit to Install (PTI) 05-12593, which was issued final on June 5, 2003.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.756 tons of PE per rolling 12 months-(stack emissions).

The above limitation is based on the following equation:

$$\text{AER} = (\text{MAER}) \times (\text{MAH}) \times (\text{CONV})$$

Where:

AER = Annual Emission Rate, in tons per rolling 12 month, period;

MAER = the Maximum Allowable Emission Rate = 0.21 lb. of PE / hour - from the stack (stack emissions);

MAH = the Maximum allowable Annual Hours of operation = 7200 operating hours; and

CONV = conversion factor = (1 ton/2000 lbs.).

Applicable Compliance Method:

Compliance will be based on the stack tests results in Section f)(2) and the record keeping in Section d)(5), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

0.001 lb of PE/hr- (fugitive emissions)

The above limitation is based on the following equation:

$$\text{HFER} = (\text{HPWR}) \times (\text{UEF}) \times (1 - \text{CEF}) \times (1 - \text{BCE})$$

Where:

HFER = Hourly Fugitive Emission Rate, in pounds per hour;

HPWR = hourly process weight rate (1.33 tons sand/hour);

UEF = Fugitive Emission Factor (3.6 lbs. PE/ton of sand)(Fire 6.23 ID30400350);

CEF = capture efficiency (0.999); and

BCE = Building Capture Efficiency (70% - Reference: April 10,1998 Letter to Ironton Iron Inc. from Stephen Giles-Director of Portsmouth Local Air Agency.

Applicable Compliance Method:

Compliance will be based on the use of hooding and capture system that has an assumed capture efficiency of 99.9% and the operation being enclosed in the facility buildings, as required in Section b)(2)c., of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

0.003 ton of PE per rolling 12 month, period-(fugitive emissions)

The above limitation is based on the following equation:

$$AFER = [(APR) \times (UEF) \times (1 - CEF) \times (1 - BCE)] / 2000$$

Where:

AFER = Annual Fugitive Emission Rate, in tons per rolling 12 month, period;

APR= Annual Production Rate (5,100 tons sand per year);

UEF= Uncontrolled Emission Factor (3.6 lbs PE/Ton Sand)(Fire 6.23 SCC ID 30400350);

CEF = capture efficiency (0.999); and

BCE = Building Capture Efficiency (70% - Reference: April 10, 1998 Letter to Ironton Iron Inc. from Stephen Giles-Director of Portsmouth Local Air Agency

Applicable Compliance Method:

Compliance will be based on the use of hooding and capture system that has an assumed capture efficiency of 99.9%; the operation being enclosed in the facility buildings, as required in Section b)(2)c., and the record keeping in Section d)(6), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

1.82 lbs of organic compounds (OC)/hr-(stack emissions)

The above limitation is based on the following equation:

$$HER = CEB^1 + CEC^2 + CEPS^3$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

CEB = the stack emission rate from the binder, in pounds per hour;

CEC = the stack emission rate from the triethylamine (TEA) catalyst, in pounds per hour; and

CEPS = the stack emission rate from the parting spray, in pounds per hour.

$${}^1\text{CEB} = (\text{TSH}) \times (\text{BEF}) \times (\text{CE}).$$

Where:

TSH= Tons of sand per hour (1.33 tons of sand/hr.);

BEF= Binder Emission Factor (0.127 lb of OC/ton sand, OCMA EPA VOC study); and

CE = capture Efficiency (0.999).

$${}^2\text{CEC} = (\text{PCH}) \times (\text{CE}) \times (1 - \text{CEF})$$

Where:

PCH = Pounds of Triethylamine (TEA) Catalyst per hour (6.0 lbs/hr);

CE = Capture Efficiency (0.999); and

CEF = Control Efficiency of the Scrubber (95%).

$${}^3\text{CEPS} = (\text{GPS}) \times (\text{OCC}) \times (\text{CE})$$

Where:

GPS= Gallons of Parting Spray per hour (0.2 gal/hr)\*\*;

OCC= Volatile Organic Compound Content (MSDS data indicates 6.74 lbs/gallon); and

CE = Capture Efficiency (0.999).

Applicable Compliance Method:

Compliance will be based on the use of hooding and capture system that has an assumed capture efficiency of 99.9%; the operation being enclosed in the facility buildings, as required in Section b)(2)c., and the record keeping requirements in Sections d)(3) and d)(4), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

0.008 lb of OC/hr-(fugitive emissions)

The above limitation is based on the following equation:

$$\text{HFER} = {}^1\text{UEB} + {}^2\text{UEC} + {}^3\text{UEPS}$$

Where:

HFER = Hourly Fugitive Emission Rate, in pounds per hour;

UEB = the fugitive emission rate from the binder, in pounds per hour;

UEC = the fugitive emission rate from the triethylamine (TEA) catalyst in pounds per hour; and

UEPS = the uncontrolled emission rate from the parting, in pounds per hour.

$${}^1\text{UEB} = (\text{TSH}) \times (\text{BEF}) \times (1-\text{CE})$$

Where:

TSH= tons of sand per hour, (1.33 tons of sand/hr);

BEF= Binder Emission Factor, (0.127 lb of OC/ton sand, OCMA EPA VOC study); and

CE = capture Efficiency (0.999).

$${}^2\text{UEC} = (\text{PCH}) \times (1-\text{CE})$$

Where:

PCH = Pounds of Triethylamine (TEA) Catalyst per hour, (6.0 lbs/hr); and

CE = Capture Efficiency (0.999)

$${}^3\text{UEPS} = (\text{GPS}) \times (\text{OCC}) \times (1-\text{CE})$$

Where:

GPS= Gallons of Parting Spray per hour (0.2 gallons/hr)\*\*;

OCC = Volatile Organic Compound Content (MSDS Indicates 6.74 lbs/gallon); and

CE = Capture Efficiency (0.999)

Applicable Compliance Method:

Compliance will be based on the use of hooding and capture system that has an assumed capture efficiency of 99.9%, as required in Section b)(2)c, of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

6.25 tons of OC per rolling 12 month, period.-(stack emissions)

The above limitation is based on the following equation:

$$\text{AER} = {}^1\text{CAEB} + {}^2\text{CAEC} + {}^3\text{CEPS}$$

Where:

AER = Annual Emissions Rate, in tons per rolling 12 month, period;

CAEB = the stack annual emission rate from the binder, in tons per rolling 12 month, period;

CAEC = the stack annual emission rate from the triethylamine (TEA) catalyst , in tons per rolling 12 month, period; and

CAEPS = the stack annual emission rate from the parting spray, in tons per rolling 12 month, period.

$${}^1\text{CAEB} = (\text{TSY}) \times (\text{BEF}) \times (\text{CE}) \times (\text{CONV}) = 0.32 \text{ tons of OC/yr}$$

Where:

TSY= Tons of sand per year (5,100 tons of sand/yr);

BEF= Binder Emission Factor (0.127 lb of OC/ton sand, OCMA EPA VOC study);

CE = capture efficiency (0.999); and

CONV = conversion factor (1 ton/2000 lbs.)

$${}^2\text{CAEC} = (\text{PCH}) \times (\text{CE}) \times (1-\text{CEF})$$

Where:

TCY = Tons of Triethylamine (TEA) Catalyst per year, (21.6 tons/yr);

CE = Capture Efficiency (0.999); and

CEF = Control Efficiency of the Scrubber (95%).

$${}^3\text{CAEPS}=(\text{GPS}) \times (\text{OCC}) \times (\text{CE}) \times (\text{CONV})= 4.85 \text{ tons of OC/yr}$$

Where:

GPY= Gallons of Parting Spray per year (1,440 gal/yr);

OCC= Volatile Organic Compound Content (MSDS data indicates 6.74 lbs/gallon);

CE = Capture Efficiency (0.999); and

CONV = conversion factor (1 ton/2000 lbs).

Applicable Compliance Method:

Compliance will be based on the use of hooding and capture system that has an assumed capture efficiency of 99.9%; the operation being enclosed in the facility buildings, as required in Section b)(2)c., and the record keeping requirements in Sections d)(3), d)(4), and d)(6), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

0.03 ton of OC per year-(fugitive emissions)

$$\text{AFER} = {}^1\text{UAEB} + {}^2\text{UAEC} + {}^3\text{UAEPS}$$

Where:

AFER = Annual Fugitive Emission Rate, in tons per rolling 12 month, period;

UAEB= the fugitive emission rate from the binder, in tons per rolling 12 month, period;

UAEC= the fugitive emission rate from the triethylamine (TEA) catalyst, in tons per rolling 12 month, period; and

UAEPS = the uncontrolled annual emission rate from the parting Spray, in tons per rolling 12 month, period.

$${}^1\text{UAEB}=(\text{TSY}) \times (\text{BEF}) \times (1-\text{CE}) \times (\text{CONV})$$

Where:

TSY= tons of sand per year, (5,100 tons of sand/yr);

BEF= Binder Emission Factor, (0.127 lb of OC/ton sand, OCMA EPA VOC study);

CE = Capture Efficiency, (0.999); and

CONV = conversion factor (1 ton/2000 lbs).

$${}^2\text{UAEC} = (\text{TCY}) \times (1 - \text{CE})$$

Where:

TCY = Tons of Triethylamine (TEA) Catalyst per year, (21.6 tons/yr); and

CE = Capture Efficiency (0.999).

$${}^3\text{UAEPS} = (\text{GPY}) \times (\text{OCC}) \times (1 - \text{CE}) \times (\text{CONV})$$

Where:

GPY= Gallons of Parting Spray per year, (1,440 gallons/yr);

OCC = Volatile Organic Compound Content, (MSDS Indicates 6.74 lbs/gallon);

CE = Capture Efficiency, (0.999); and

CONV = conversion factor (1 ton/2000 lbs).

Applicable Compliance Method:

Compliance will be based on the use of hooding and capture system that has an assumed capture efficiency of 99.9%; the operation being enclosed in the facility buildings, as required in Section b)(2)c., and the record keeping requirements in Section d)(6), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

i. Emission Limitation:

The particulate emissions (PE) from baghouse # 4, which controls emissions from this emissions unit shall not exceed 11.53 tons/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse #4, in acfm, (74,731, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

j. Visible Emission Limitations:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.

Applicable Compliance Method:

Compliance shall be based on the record keeping in section d)(7) of this permit

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1)]

k. Visible Emission Limitations:

Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.

Applicable Compliance Method:

Compliance shall be based on the record keeping in section d)(7) of this permit

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emissions testing shall be conducted to demonstrate compliance 0.21 lb of particulate emissions (PE)/hour and 0.005 gr./dscf PE limit from the baghouse stack .

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A;

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

d. The test(s) shall be conducted while operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**17. P088, DMD 1000 Ton Cold Forging Press**

**Operations, Property and/or Equipment Description:**

DMD 1000 Ton Cold Forging Press

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)f., and d)(3).

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) and (PTI 05-12998)	0.15 lb of particulate emissions (PE) /hr and 0.03 g/dscf.  6.18 lbs of organic compound (OC)/hr  See Sections b)(2)b., c)(1), c)(2), d)(2), d)(3), e)(1), f)(1)a., f)(1)b., and f)(1)c., below.
b.	OAC rule 3745-31-05(E) (State Enforceable only)	15.78 tons of OC per year.  See Sections d)(2), and e)(2)
c.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (A)(3)
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (A)(3)

(2) Additional Terms and Conditions

a. Best Available Technology (BAT) has been determined to be the use of a particulate collector to control PE emissions from this unit.

- b. Visible particulate emissions from the stack serving this emissions unit shall not exceed zero percent (0%) opacity as a six-minute average.

[OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with a particulate emission control device that will minimize and/or eliminate the release of PE emissions.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each calendar year the emission unit is in operation:

- a. the company identification for each coating material employed;
- b. the amount of coating material(s) employed, in gallons;
- c. the organic compound content of coating material(s) employed, in pounds per gallon; and
- d. the total organic compound emissions from the coating materials employed, in tons per calendar year, (the sum of: [(“b” x “c”)/2000]).

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

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

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-31-05(A)(3)] or if TV [OAC rule 3745-77-07(A)(3)]

- (3) The permittee shall properly maintain the air pollution control device when the emissions unit is in operation. The air pollution control device shall be maintained in accordance

with the manufacturer's recommendations, instructions, and the operating manuals. The permittee shall collect and record the following information each day the emissions unit is in operation:

- a. a log (date and total time) of the downtime or bypass of the mist eliminator, and/or downtime of the air pollution control device, when the associated emissions unit was in operation.

These records shall be maintained at the facility for a period of five years.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. each period of time (start time and date, and end time and date) when the air pollution control device was not employed while this emissions unit was operating; and/or
- b. Visible particulate emissions from the stack serving this emissions unit exceeds zero percent (0%) opacity as a six-minute average.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-77-07(A)(3)(c) and [ORC 3704.03(F)].

- (2) The permittee shall submit annual deviation (excursion) reports that identify the following:

- a. 15.78 tons of OC per year.

The annual deviation (excursion) reports shall be submitted by April 30<sup>th</sup> each calendar year and shall cover the annual emissions of the previous calendar year.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
- b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
- c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation(s) in section b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

0.15 lb of particulate emissions (PE)/hour and 0.03 grains per dry standard cubic feet

The above limitation is based on the following equation:

$$HER = (PCEF) \times (EFF) \times (TCONV) \times (GCONV)$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

PCEF = the Particulate Control Exhaust Flow rate (Maximum 2000 acfm based on specifications from Manufacturer.);

EFF = the Particulate Control Exhaust Efficiency (0.03 grains/dscf) based on design specifications from the manufacturer.

TCONV = Time Conversion Factor (60 minutes/hour).

GCONV = Grain Conversion Factor (1 lb/7,000 grains)

Applicable Compliance Method:

Compliance shall be based on: the maximum exhaust flow rate of the mist collector being at 4500 actual cubic feet per minute; the exhaust particulate concentration in the exhaust being no greater than 0.03 grains per dry standard cubic feet; and the record keeping and reporting requirements under sections d)(5) and e)(1)c., of this permit.

If requested, the permittee shall conduct or have conducted a compliance stack test to demonstrate compliance with the above particulate limitations. The stack test shall be conducted in accordance with 40 CFR Part 60 Appendix A Methods 1-5.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

6.18 lb of OC/hr, based on daily average

The above limitation is based on the following equation:

$$\text{HER} = \text{SER} + \text{LER} + \text{BER}$$

Where:

HER = Hourly Emissions Rate, in pounds per hour;

SER<sup>1</sup> = Solvent Emission Rate from the binder, in pounds per hour (based on a daily average);

LER<sup>2</sup> = Lubricant Emission Rate, in pounds per hour (based on a daily average);  
and

BER<sup>3</sup> = Bonder lube Emission Rate, in pounds per hour (based on a daily average).

$$^1\text{SER} = \frac{[(\text{DU}) \times (\text{DEN}) \times (\text{VOL})]}{(\text{HPD})}$$

Where:

DU= Daily Usage of solvent per day (15 gallons per day);

DEN = Density of material (6.59 lbs per gallon based on MSDS);

VOL = Percent Volatile of the material (100 % based on MSDS); and

HPD = Hours Per Day of operation (24 hours per day).

$$^2\text{LER} = \frac{[(\text{DU}) \times (\text{DEN}) \times (\text{VOL})]}{(\text{HPD})}$$

Where:

DU= Daily Usage of Lubricant per day (2 gallons per day);

DEN = Density of material (7.84 lbs per gallon based on MSDS);

VOL = Percent Volatile of the material (88 % based on MSDS); and

HPD = Hours Per Day of operation (24 hours per day).

$$^3\text{BER} = \frac{[(\text{DU}) \times (\text{DEN}) \times (\text{VOL})]}{(\text{HPD})}$$

Where:

DU= Daily Usage of Bonder lube per day (12 gallons per day);

DEN = Density of material (8.5 lbs per gallon based on estimate of material to be used);

VOL = Percent Volatile of the material (35% based on estimate of material to be used); and

HPD = Hours Per Day of operation (24 hours per day).

Applicable Compliance Method:

Compliance shall be based on the information provided by the applicant in PTI 05-12997. As part of the BAT determination the OC emissions are limited to not exceed 6.18 pounds per hour and 15.78 tons per year, regardless of the use of photochemically reactive materials or not. Compliance with the hourly limit shall be based on the assumptions in the PTI that the hourly emissions rate represents the maximum potential of this emissions unit. Any changes in the operations and/or determinations of errors in the above assumed maximums that increase the hourly potential will need to be address under appropriate permit review.

Compliance with the 15.78 tons of OC per year shall be based on the record keeping and the reporting under sections d)(2) and e)(2), respectively.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed zero percent (0%) opacity as a six-minute average.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) None.

**18. P097, FC #3 Disc Core Machine**

**Operations, Property and/or Equipment Description:**

FC Disc Core Machine 3, w/ scrubber primary control, aqueous binder, and organic parting spray

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	<p>The use of a scrubber control system that will minimize and/or eliminate the release of particulate emissions (PE) volatile organic compound (VOC) emissions.</p> <p>Use of a baghouse to minimize and/or eliminate the release of particulate emissions (PE).</p> <p>Hourly emissions shall not exceed the following:</p> <p>1.87 pounds of VOC; and/or 0.36 pounds of PE.</p>
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-17-11(B)(1) Table I	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (A)(3).
d.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compound (VOC) and particulate emissions (PE) emissions from this emissions unit since the emissions are less than ten tons per year.

c. The hourly PE and VOC emission limitations were established to reflect the maximum potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

(1) The use of parting spray with a VOC content that does not exceed 6.74 pounds per gallon, as applied.

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

(2) The use of binder catalyst VOC content that does not exceed 6.1 pounds per gallon.

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

d) Monitoring and/or Recordkeeping Requirements

(1) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall properly operate, and maintain the wet scrubber while the emissions unit is in operation. The wet scrubber shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record information that either demonstrates that the wet scrubber is being operated in accordance with the manufacturer's recommendations, instructions, and operating manual(s) and/or any problems and corrections that are being made.

The permittee shall maintain daily records of any time that the baghouse and/or wet scrubber was not employed at the time that this emissions unit was processing materials.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) This facility shall maintain the following monthly records on the parting spray employed in this emissions unit:
- a. The name and/or identification of each parting spray and/or binder catalyst employed; and
  - b. The VOC content of each parting spray and/or binder catalyst employed, in pounds per gallon, as applied.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. an identification use of parting sprays with a VOC content that does exceeds 6.74 pounds per gallon, as applied;
  - b. an identification use of binder catalyst with a VOC content that does exceeds 6.1 pounds per gallon;
  - c. identify the all periods of time in which this emissions unit was in operation and the baghouse(s) was not being employed and/or the pressure drop across the baghouse(s) did not comply with the allowable range; and/or
  - d. identify the all periods of time in which this emissions unit was in operation and the wet scrubber was not being employed and/or was not calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)].

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

1.87 lb of VOC emissions/hr

The hourly OC emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = (Pu \times Vc) + \{(Cu \times Cv) \times [1 - (Cpe \times CES)]\} + (Su \times BEF)$$

Where

HER = Hourly emission rate, in lbs of OC/hr;

Pu = Part Spray usage rate, in gallons per hour, (0.2 gallons per hour, from Honda of America's PTI application and Emissions Activity form);

Vc = VOC content of parting spray, in pounds per gallon, (6.74 pounds of VOC per gallon of parting spray, from Honda of America's PTI Application and Emission Activity Form);

Cu = Catalyst usage, in gallons per hour, (1.0, approximate usage based on binder actual binder usage being 6 pounds per hour);

Cv = Binder VOC content, in pounds per gallon, (6.1, worst case based on Honda of America's draft PTI comments);

Cpe = Capture efficiency, in percent captured, (99%, from Honda of America's PTI application and Emissions Activity form);

Ces = Control efficiency for the scrubber, in percent removed, (95%, from Honda of America's PTI application and Emissions Activity form);

Su = Sand Used per hour (1.33 tons/hr); and

BEF = Binder emission factor (0.127 lbs VOC/Ton sand – from OCMA VOC Study)

$$HER = (0.2 \text{ gal/hr} \times 6.74 \text{ pounds per gallon}) + \{(1.0 \text{ gallons per hour} \times 6.1 \text{ pounds per gallon}) \times [1 - (99\% \text{ capture} \times 95\% \text{ controlled})]\} + (1.33 \text{ tons of sand} \times 0.127 \text{ pounds emitted per ton of sand employed})$$

HER = 1.87 pounds of VOC emitted per hour

Applicable Compliance Method:

Compliance will be assumed based on the use of parting spray with a VOC content not to exceed 6.75 pounds per gallon, as applied, and the use of the wet scrubber to reduce and minimize the release of VOC from this operation, and the recordkeeping in sections d)(2) and (4) of this permit.

If required, the permittee shall demonstrate formulation data or USEPA Method 24 shall be used to determine the VOC content of the materials employed and Method 18, 25, and/or alternative method or methods that have been reviewed and approved by the Ohio SWDO and/or CO to determine compliance with hourly emission limitation.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.36 lbs of PE/hr

Above hourly potential PE is based on the following equation:

$$HER = [(Bhe \times Af \times 60 \times 1.43E \text{ to } -4) + (Su \times PEF \times CCAP \times BCAP)]$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

Bhe = Baghouse 2 emission rate, in grains per minute, (0.004 grains per standard dry cubic feet, from Honda of America's PTI application and Emissions Activity form); and

Af = Maximum Air Flow to Baghouse 2, in standard cubic feet per minute. (10,000 cubic feet per minute, from Honda of America's PTI application and Emissions Activity form).

Su = Sand Used per hour (1.33 tons/hr)

BEF = Particulate Emission Factor (3.6 lbs PE/Ton – Fire 6.23 SCC ID 30400350)

CCAP – Capture Efficiency of Baghouse (99%)

BCAP = Building Capture Efficiency (70%)

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**19. P098, FC Spin Line #2 Autopour System**

**Operations, Property and/or Equipment Description:**

Spin Line 2 Autopour

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-05(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	The particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102, shall not exceed 13.14 tons (PE) per year.  The fugitive emissions from P098 shall not exceed 1.53 tons of PE per year.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). This permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log:

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

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. All periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that:
- a. Identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. Identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. Describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouse(s) being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- b. Potential Baghouse Emission:

The potential particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102 is 13.14 tons (PE)combined per year.

The potential PE annual emission from baghouse #1 is based on the following equation:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 1, in acfm, (70,000, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (8,760 hrs, maximum potential hours per year).

Applicable Compliance Method:

Compliance shall be assumed based on verification of the 0.005 grains/dscf by periodic stack testing in section f)(2), the maximum annual hours of operation at 8,760, and the recordkeeping in section d)(1) and d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Potential Fugitive Dust Emission:

The potential fugitive particulate emissions (PE) from emissions unit P098 is 1.53 tons (PE ) per year.

The potential fugitive PE per year is based on the following equation:

$$FER = [((MMR \times 8760 \text{ hrs}) \times Ef) \times (1 - CAP)] / 2000 \text{ lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MMR = Maximum metal usage rate, in tons, (3.4 tons/hr, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (2.06 lbs PE/ton of metal, from data provided by Honda); and

CAP = Assumed capture efficiency, in %, (95.0% (0.95), from data provided by Honda).

Applicable Compliance Method:

Compliance has be assumed based on the potential metal throughput not exceeding 3.4 tons per hour. Prior any modification of this emissions unit that would increase the metal through capacity above 3.4 tons per hour, the permittee shall apply for and obtain all applicable air pollution permits.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**20. P099, FC Spin Line #2 Spincast Machine #1**

**Operations, Property and/or Equipment Description:**

Spin Line 2 Spincast Machine 3

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-05(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	The particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102, shall not exceed 13.14 tons (PE) per year.  The fugitive emissions from P099 shall not exceed 0.05 tons of PE per year.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). This permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log:

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

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. All periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that:
- a. Identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. Identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. Describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouse(s) being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- b. Potential Baghouse Emission:

The potential particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102 is 13.14 tons (PE)combined per year.

The potential PE annual emission from baghouse #1 is based on the following equation:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 1, in acfm, (70,000, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (8,760 hrs, maximum potential hours per year).

Applicable Compliance Method:

Compliance shall be assumed based on verification of the 0.005 grains/dscf by periodic stack testing in section f)(2), the maximum annual hours of operation at 8,760, and the recordkeeping in section d)(1) and d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Potential Fugitive Dust Emission:

The potential fugitive particulate emissions (PE) from emissions unit P099 is 0.05 tons (PE) per year.

The potential fugitive PE per year is based on the following equation:

$$FER = [((MMR \times 8760 \text{ hrs}) \times Ef) \times (1 - CAP)] / 2000 \text{ lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MMR = Maximum metal usage rate, in tons, (3.4 tons/hr, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (0.33 lbs PE/ton of metal, from from Air Emission from Permanent Mold Casting of Ductile Iron Pipe, prepared by Marvin D. McKinley, Professor of Chemical Engineering, Univ. of AL, 9/94); and

CAP = Assumed capture efficiency, in %, (99.0% (0.99), from data provided by Honda).

Applicable Compliance Method:

Compliance has be assumed based on the potential metal throughput not exceeding 3.4 tons per hour. Prior any modification of this emissions unit that would increase the metal through capacity above 3.4 tons per hour, the permittee shall apply for and obtain all applicable air pollution permits.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**21. P100, FC Spin Line #2 Shotblast System**

**Operations, Property and/or Equipment Description:**

Spin Line 2 Shotblast Machine

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-05(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	The particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102, shall not exceed 13.14 tons (PE) per year.  The fugitive emissions from this emissions unit shall not exceed 0.23 tons of PE per year.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

f.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(1), below.
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(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the “controlled” potential to emit is less than ten tons per year.

c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). This permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

(2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. All periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouse(s) being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- b. Potential Baghouse Emission:

The potential particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102 is 13.14 tons (PE)combined per year.

The potential PE annual emission from baghouse #1 is based on the following equation:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 1, in acfm, (70,000, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and  
Ho = Allowable rolling 12-month hours of operation limitation, (8,760 hrs, maximum potential hours per year).

Applicable Compliance Method:

Compliance shall be assumed based on verification of the 0.005 grains/dscf by periodic stack testing in section f)(2), the maximum annual hours of operation at 8,760, and the recordkeeping in section d)(1) and d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Potential Fugitive Dust Emission:

The potential fugitive particulate emissions (PE) from this emissions unit is 0.26 tons (PE) per year.

The potential fugitive PE per year is based on the following equation:

$$FER = [((MMR \times 8760 \text{ hrs}) \times E_f) \times (1 - CAP)] / 2000 \text{ lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MMR = Maximum metal usage rate, in tons, (3.4 tons/hr, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (15.5 lbs PE/ton of metal, from from Modern Casting, 1/72); and

CAP = Assumed capture efficiency, in %, (99.9% (0.999), from data provided by Honda).

Applicable Compliance Method:

Compliance has be assumed based on the potential metal throughput not exceeding 3.4 tons per hour. Prior any modification of this emissions unit that would increase the metal through capacity above 3.4 tons per hour, the permittee shall apply for and obtain all applicable air pollution permits.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
- a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**22. P901, Foundry Melting System**

**Operations, Property and/or Equipment Description:**

Foundry Melting System

- 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) and (PTI 05-02421)	The stack emissions from this emissions unit shall not exceed the following:  0.03 grains of particulate emissions (PE) per dry standard cubic feet;  4.54 pounds of PE per hour;  10 pounds of carbon monoxide (CO) per hour;  5.1 pounds of nitrogen oxides (NOx) per hour; and  19.2 pounds of sulfur oxides (SOx) per hour.
b.	OAC rule 3745-31-05(D) (To avoid becoming a PSD major facility)	The stack emissions from this emissions unit shall not exceed the following:  13.62 tons of PE per rolling 12 month, period; 30 tons CO per rolling 12 month, period; 15.3 tons of NOx per rolling 12 month, period; and 57.6 tons of SOx per rolling 12 month, period.

c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-08(B)(1)	Visible particulate emissions from fugitive dust shall not exceed twenty percent opacity as a three-minute average.
e.	OAC rule 3745-21-08(D)	See Section c)(4) below.
f.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(4), below.
g.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for CO emissions)	See Section d)(2), below.

(2) Additional Terms and Conditions

a. none.

c) Operational Restrictions

(1) This emissions unit shall be equipped with capture hooding, a bag house, and an afterburner that minimizes and/or eliminates the release of air pollutants.

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

(2) The maximum operating hours for this emissions unit shall not exceed 6,000, based upon a rolling, 12 month summation of the operating hours.

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

(3) This emissions unit shall be equipped with a charge door that shall only be open when charging is occurring and a ventilation system that will maintain a sufficient draft across the charging door as to minimize and/or eliminate fugitive dust emissions at all times.

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

(4) Emissions unit gases shall be burned at 1300 degrees Fahrenheit in a direct flame afterburner or equivalent device, designed for a minimum of 0.3 second residence time.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-21-08(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

The permittee shall collect and record the following information for each day:

- a. All periods of time during which the combustion temperature within the afterburner, when the emissions unit was in operation, was less than 1300°F.
- b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-21-08(D), and 40 CFR Part 64]

- (3) The permittee shall maintain monthly records of the following information:
- a. the total operating hours; and
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month operating hours limitation of 6,000 hours; and/or
  - b. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range;
  - c. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator was more than 50 degrees Fahrenheit (10 degrees Celsius) below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and
  - d. all instances where the emissions unit was operated without the incinerator operating.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

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

- (2) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
  - b. describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

4.54 pounds of particulates per hour and 0.03 grains per dry standard cubic feet

The above limitation was established based on the following equation:

$$\text{AHER} = (\text{BFR}) \times (\text{AV}) \times (\text{ST} / \text{BET}) \times (\text{BEP}/\text{SP}) \times (\text{BER}) \times (\text{TI}) \times (\text{CONV})$$

Where:

AHER = maximum hourly emission rate, in pounds per hour;

BFR = baghouse flow rate (17,769 acfm);

AV = the air variability factor (105%);

ST = standard temperature (530 degrees Rankine);

BET = baghouse exit temperature (560 degrees Rankine);

BEP = baghouse exit pressure (14.69 lb/in<sup>2</sup>);

SP = standard pressure (14.69 lb/in<sup>2</sup>);

BER = baghouse emission rate (0.03 grain of PE/dscf);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Applicable Compliance Method:

Compliance shall be based on May 2, 2000, with 0.4 pounds of particulate emissions (PE) per hour at a process rate of 18.67 metric tons per hour, and the stack test under Section f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

13.62 tons of particulate emissions per rolling 12 month, period.

The above limitation was established based on the following equation

$$\text{AER} = (\text{HER} \times \text{Ho}) / 2000$$

Where:

AER = Annual Emission Rate, in tons per rolling 12-month period;

HER = Hourly Emissions Rate, in pounds per hour, (4.54); and

Ho = Hours of Operation, in hours operated in a rolling 12 month, period, (6,000).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the results of the most recent stack test and the record keeping requirements established in section d), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

10.0 pounds of carbon monoxide (CO) per hour

The above limitation was established based on the following equation:

$$\text{HER} = (\text{EF}) \times (\text{MPWR})$$

Where:

HER = maximum hourly emission rate, in pounds per hour;

MPWR = maximum process weight rate (22.6 tons of iron melted/hr); and

EF = the emission factor (0.442 lb of CO emissions/ton of iron melted)\*.

\* The CO emission factor obtained from emission test data provided by Honda.

Applicable Compliance Method:

Compliance shall be based on May 2, 2000, with 1.3 pounds of CO per hour at a process rate of 18.67 metric tons per hour, and the stack test under section f)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

30 tons of CO per rolling 12 month, period.

The above limitation was established based on the following equation:

$$\text{AER} = (\text{AER}) \times (\text{MHPY}) \times (\text{CONV})$$

Where:

AER = annual allowable emission rate, in tons per year;;

HER = maximum hourly emission rate (10.0 lbs of CO emissions/hr);

MHPY = maximum annual hours of operation (6,000 hours/yr); and

CONV = the conversion factor (1 ton/ 2,000 lbs).

Applicable Compliance Determination:

Based on the stack test data from May 2, 2000, and the record keeping requirements established in sections d), of this permit this emissions unit complies with its annual CO limitation. Further compliance will be determined based on the stack test required under Section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

5.1 pounds of nitrogen oxides (NO<sub>x</sub>) per hour

The above limitation was established based on the following equation:

$$\text{AER} = (\text{MPWR}) \times (\text{EF})$$

Where:

AER = maximum hourly emission rate , in pounds per hour;  
MPWR = maximum process weight rate (22.6 tons of iron melted/hr); and  
EF = the emission factor (0.225 lb of NO<sub>x</sub> emissions/ton of iron melted)\*.

\* The NO<sub>x</sub> emission factor obtained from emission test data provided by Honda.

Applicable Compliance Method:

Compliance shall be based on May 2, 2000, with 3.4 pounds of NO<sub>x</sub> per hour at a process rate of 18.67 metric tons per hour, and the stack test under Section f)(2).

\*Note In AP-42 Table 12.10-5. NO<sub>x</sub> emissions as "NA" no data.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

15.3 tons of NO<sub>x</sub> per rolling 12 month, period.

Compliance with the above limitation was established based on the following equation

$$\text{AAER} = (\text{AER}) \times (\text{MHPY}) \times (\text{CONV})$$

Where:

AAER = annual allowable emission rate, in tons per year;  
AER = maximum hourly emission rate (5.1 lbs of NO<sub>x</sub> emissions/hr);  
MHPY = maximum annual hours of operation (6,000 hours/yr); and  
CONV = the conversion factor (1 ton/ 2,000 lbs).

Applicable Compliance Determination:

Based on the stack test data from May 2, 2000, and the record keeping requirements established in sections d), of this permit this emissions unit complies with its annual NOx limitation. Further compliance will be determined based on the stack test required under Section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

19.20 pounds of sulfur oxides (SOx) per hour

$AER = (MPWR) \times (EF) = 19.2 \text{ lbs of SO}_2 \text{ emissions/hr}$

where:

AER = maximum hourly emission rate (19.2 lbs of SO<sub>2</sub> emissions/hr);

MPWR = maximum process weight rate (22.6 tons of iron melted/hr); and

EF = the emission factor (0.849 lb of SO<sub>2</sub> emissions/ton of iron melted)\*.

\* The SO<sub>2</sub> emission factor obtained from emission test data provided by Honda.

Applicable Compliance Method:

Compliance shall be based on May 2, 2000, with 1.5 pounds of particulate emissions (PE) per hour at a process rate of 18.67 metric tons per hour, and the stack test under Section f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

57.6 tons of SOx emissions per rolling 12 month, period.

The above limitation was established based on the following equation

$AAER = (AER) \times (MHPY) \times (CONV)$

Where:

AAER = annual allowable emission rate, in tons per year;

AER = maximum hourly emission rate (19.2 lbs of SO<sub>2</sub> emissions/hr);

MHPY = maximum annual hours of operation (6,000 hours/yr); and

CONV = the conversion factor (1 ton/2,000 lbs).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the results of the most recent stack test and the record keeping requirements established in section d), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

i. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing on this emissions unit.
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE hourly limitation.
  - c. The emission testing shall be conducted to demonstrate compliance with the allowable PE grains per dry standard cubic feet limitation.
  - d. The emission testing shall be conducted to demonstrate compliance with the allowable CO hourly limitation.
  - e. The emission testing shall be conducted to demonstrate compliance with the allowable NOx hourly limitation.
  - f. The emission testing shall be conducted to demonstrate compliance with the allowable SO2 hourly limitation.
  - g. The following test methods shall be employed to during the mass emission stack testing:
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A;
    - ii. CO: Method 10 of 40 CFR Part 60, Appendix A; and
    - iii. SO2: Method 6 of 40 CFR Part 60, Appendix A.

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

- h. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) and afterburner are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
  - a. None.

**23. P902, Mold Pouring and Cooling Line 1**

**Operations, Property and/or Equipment Description:**

Mold Pouring and Cooling Line 1

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific 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)	<p>The combined stacked Carbon Monoxide (CO) emissions from emissions units P020 and P902 shall not exceed 61.8 lbs./hr</p> <p>The combined stacked Organic Compound (OC) emissions from emissions units P020 and P902 shall not exceed 18.32 lbs of organic compound (OC) emissions/hr</p>
b.	OAC rule 3745-31-05(D) (to avoid becoming a PSD major facility)	<p>The particulate emissions (PE) from baghouse # 4, which controls emissions from emissions unit P902, emissions unit P020, Line I Didion, and emissions unit P087, Disc M/C, shall not exceed 11.53 tons (PE)/ rolling 12-month period.</p> <p>The combined Carbon Monoxide (CO) from emissions units P020 and P902 shall not exceed 95.72 tons/ 12-month period, based on a rolling, 12-month summation, including fugitives.</p> <p>The combined Organic Compound (OC) emissions from emissions units P020 and P902 shall not exceed 28.4 tons/ 12-month period, based on a rolling, 12-month summation, including fugitives..</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>1.46 tons of Nitrogen Oxides (NOx)/ 12-month period, based on a rolling, 12-month summation, including fugitives.</p> <p>0.97 tons of Sulfur Dioxide (SO<sub>2</sub>)/ 12-month period, based on a rolling, 12-month summation, including fugitives.</p> <p>The fugitive emissions from P902 shall not exceed 1.20 tons of PE/ rolling 12-month period.</p>
c.	OAC rule 3745-21-08	The CO limitations specified by this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3)
d.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any roof vent that emits emissions into the ambient air from this emission unit shall not exceed 20% opacity, as a 6-minute average.
e.	OAC rule 3745-17-11(B)(1) Figure II curve P-1	The PE emissions shall not exceed 9.6 lbs. per hour
f.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	See Sections b)(2)a., thru c., and e., c)(1) and (2), d)(1), (2) and (5), e)(1) and (2), f)(1)b., and f)(2), below.
g.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)f., below.
h.	40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906)	<p>The permittee shall comply with the applicable emission limitations(s) as specified in 40 CFR Part 63, Subpart ZZZZZ, (Iron and Steel Foundries Area Sources), in accordance with 40 CFR Parts 63.10895.</p> <p>Should Subpart ZZZZZ be revised during the term of this permit, the permittee shall comply with the applicable requirements of the most recent promulgation.</p>
i.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM))	See Section d)(6), below.

(2) Additional Terms and Conditions

- a. This permit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- b. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- c. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control devise associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- d. The hourly CO emission limitation was established to reflect the maximum potential to emit for this emissions unit. Therefore, it is not necessary to establish record keeping and reporting requirements to ensure compliance with these limitations.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

- f. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) emissions from this emissions unit since the potential emissions are less than ten tons per year.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) The maximum operating hours of this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The maximum amount of metal processed through this emissions unit shall not exceed 57,320 tons per rolling 12-month, period.

[Authority for term: OAC rule 3745-31-05(D)]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the total operating hours;
- b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
- c. the hours that baghouse # 4 was operated;
- d. the particulate emissions (PE) rate from baghouse # 4, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse # 4, in tons, (the summation of:  $\{[("d" \times 74,731 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a" \} / 2,000 \text{ lbs/ton}$ ); and
- f. the rolling, 12-month total PE from baghouse # 4. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:

- a. the amount of metal processed in emissions unit P902, in tons; and

- b. the rolling, 12-month total metal processed in emissions unit P902. The rolling, 12-month summation of the total metal employed (the total amount of metal employed for the current month ("a") plus the total amount of metal employed for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain monthly records of the following information:
  - a. the carbon monoxide (CO) rate, in pounds per ton of metal processed, 3.34 lbs/ton of metal or result from most recent stack test;
  - b. the monthly CO emissions, in tons, (the summation of: {(metal processed "Section d)(2)a." x "a") / 2000 lbs/ton}; and
  - c. the rolling, 12-month total fugitive CO emissions from P020 & P902. The rolling, 12-month summation of the total CO emissions (the total amount of CO emitted for the current month ("b") plus the total amount of CO emitted for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain monthly records of the following information:
  - a. the organic compound (OC) rate, in pounds per ton of metal processed, 0.99 lbs/ton of metal or result from most recent stack test;
  - b. the monthly OC emissions, in tons, (the summation of: {(metal processed "Section d)(2)a." x "a") / 2000 lbs/ton}; and
  - c. the rolling, 12-month total fugitive OC emissions from P020 & P902. The rolling, 12-month summation of the total OC emissions (the total amount of OC emitted for the current month ("b") plus the total amount of OC emitted for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

(7) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all exceedances of the rolling, 12-month period CO emission limitation of 95.72 tons, including fugitives;
- b. all exceedances of the rolling, 12-month period OC emission limitation of 28.37 tons;
- c. all exceedances of the combined rolling, 12-month period PE limitation of 11.53 tons from baghouse # 5, (emissions from emissions unit P017, emissions unit P910, Holding Furnaces, and the charging and tapping of emissions unit P901, Cupola);
- d. all exceedances of the rolling 12-month period metal processed of 57,320 tons per rolling 12-month period in emissions unit P902;;
- e. all exceedances of the rolling, 12-month period 7,200 operation hour limitation;
- f. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR Part 63.10880-10906]

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

9.6 lbs of PE/hr

The hourly emission limitation was established and based on OAC rule 3745-17-11(B)(1) Figure II curve P-2, equation (b):

$$AMR = 0.5782 \times (U^{0.6456})$$

Where:

AMR = Allowable Mass Emission Rate, in lbs/hr;

U = Uncontrolled particulate emissions, in lbs/hr (Fire, SCC 304000318, emission factor of, 4.2 lbs emitted/ton of metal processed multiplied by 18.5 tons of metal processed /hr maximum).

Emission calculation is based on the requirements of OAC rule 3745-17-11(B)(1) Figure II, curve P-1.

Applicable Compliance Method:

Compliance with the above limitations is based on the 18.5 tons of metal processed being the maximum potential process rate for this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 4, which controls emissions from this emissions unit shall not exceed 11.53 tons/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse #4, in acfm, (74,731, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P902, shall not exceed 1.20 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$\text{FER} = [(\text{MSR} \times \text{Ef}) \times (1-\text{CAP})] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum metal processed rate, in tons, (57,320 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of sand, (4.2 lbs/ton of metal, Fire SCC 304000318); and

CAP = Assumed capture efficiency, in %, (99.0% (0.990)), from data provided by Honda).

Applicable Compliance Method:

Compliance is assumed based on the maintenance and upkeep of the hooding and duct work emissions unit and the throughput records in section d)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

61.8 lb of CO stacked emissions/hr, combined emissions from P020 and P902

The hourly CO emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{HER} = \text{COER} \times \text{MMR}$$

Where:

HER = Hourly emission rate, in lbs of CO/hr;

COER = Emission factor, in lbs/ton of metal processed, (3.34 lbs/ton processed, Honda's Emission Tests 2009); and

MMR = Maximum tons of metal processed per hour, (18.5 tons/hr, from Honda's Emission Activity Category form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the understanding that the maximum hourly metal processed will not exceed 18.5 tons/hr.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

95.72 tons of CO/ 12-month period, based on a rolling, 12-month summation, including fugitives, combined from P020 and P902.

Applicable Compliance Method:

The annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = (\text{COEF} \times \text{MMR}) / 2000$$

Where:

AER = Annual Emission Rate;

COER = Carbon monoxide Emission Rate (3.34 lbs/ton processed, Honda's Emission Test 2000);

CAP = Hooding Capture Efficiency, (based on Honda's best estimate on hooding capture of 99.0%, (0.990)); and

MMR = Maximum tons processed per 12-months (57,320, Honda's Emission Activity Form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(4), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

18.32 lbs of OC stacked emissions/hr, combined from P020 and P902.

The hourly OC emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$HER = COER \times MMR$

Where:

HER = Hourly Emission Rate, in lbs of OC/hr;

OCER = Emission factor, in lbs/ton of metal processed, (0.99 lbs/ton processed, Honda's Emission Tests 2000); and

MMR = Maximum tons of metal processed per hour, (18.5 tons/hr, from Honda's Emission Activity Category form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the understanding that the maximum hourly metal processed will not exceed 18.5 tons/hr.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

28.4 tons of OC/ 12-month period, based on a rolling, 12-month summation, including fugitives, combined from P020 and P902.

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The annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = (\text{OCEF} \times \text{MMR})/2000$$

Where:

AER = annual emission rate;

OCER = Organic Compound Emission Rate, (0.99 lbs/ton processed, Honda's Emission Test 2009); and

MMR = Maximum tons processed per 12-months (57,320, Honda's Emission Activity Form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(5), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

h. Emission Limitation:

1.42 tons of Nitrogen Oxides (NO<sub>x</sub>)/ 12-month period, based on a rolling, 12-month summation, including fugitives.

The annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = (\text{NOXER} \times \text{MMR})/2000$$

Where:

AER = annual emission rate;

NOXER = Nitrogen Oxide Emission Rate, (0.05 lbs/ton processed, Honda's Emission Test 2002);

CAP = Hooding Capture Efficiency, (based on Honda's best estimate on hooding capture of, 99.0% (0.990)); and

MMR = Maximum tons processed per 12-months (57,320, Honda's Emission Activity Form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements to assure the rolling 12-month metal processed through this emissions unit does not exceed 57,320 tons.

[Authority for term: OAC rule 3745-77-07(C)(1)]

i. Emission Limitation:

0.85 tons of Sulfur Dioxide (SO<sub>2</sub>)/ 12-month period, based on a rolling, 12-month summation, including fugitives.

The annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$\text{AER} = [(\text{SO}_2\text{EF} \times \text{MMR}) + \{(\text{SO}_2\text{ER} \times (1-\text{CAP})) - \text{SO}_2\text{ER}\} \times \text{MMR}]/2000$$

Where:

AER = annual emission rate;

SO<sub>2</sub>ER = SO<sub>2</sub> Emission Rate, (0.03 lbs/ton processed, Honda's Emission Test 2000);

CAP = Hooding Capture Efficiency, (based on Honda's best estimate on hooding capture of 99.0%, (0.990)); and

MMR = Maximum tons processed per 12-months (57,320, Honda's Emission Activity Form).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements to assure the rolling 12-month metal processed through this emissions unit does not exceed 57,320 tons.

[Authority for term: OAC rule 3745-77-07(C)(1)]

j. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission tests on the baghouse vents to demonstrate compliance with the above combined allowable particulate emission limitations from this emission unit as well as the other emission units whose captures particulate emissions are vented to baghouses BH-4 and the CO emissions from this emission unit.
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable CO emission limitations.
  - c. The emission testing shall be conducted to demonstrate compliance with the particulate emissions rate limitation of 0.005 grains/dscf, from any dust collectors or stacks associated with this emissions unit.
  - d. The emission testing shall be conducted to demonstrate compliance with the allowable OC emission limitations.
  - e. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations:
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A;
    - ii. CO: Methods 1-4, and 10, of 40 CFR Part 60, Appendix A; and
    - iii. OC: Methods 1-4, 18, or 25 of 40 CFR Part 60, Appendix AAlternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - f. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) See 40 CFR Part 63, Subpart ZZZZZ (40 CFR 63.10880-10906).

[Authority for term: 40 CFR 63.10880-10906]

g) Miscellaneous Requirements

- (1) None.

**24. P906, FC Line 3 Melting System**

**Operations, Property and/or Equipment Description:**

FC Line 3 Melting System

- 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) and (PTI 05-07140)	Stack emissions from this emissions unit shall not exceed:  Particulate emissions (PE) 0.001 grains per actual cubic feet; (PE) 0.088 pounds per hour; and Lead (Pd) 0.00036 pounds per hour.  Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.  See Sections c)(1), c)(2),
b.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	Exempt.  See Section b)(2)a., below.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) The permittee shall operate and maintain this emissions unit along with any capture hood, enclosures, etc... in a manner that minimizes and/or eliminates fugitive emissions.

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

- (2) This emissions unit shall equipped with a hooding and ventilation system that that vents the emissions to a fabric filter system.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 2 to 10 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
- b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
- c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.001 grains of particulate emissions (PE) per actual standard cubic feet.

Applicable Compliance Method:

Compliance shall be demonstrate based on the stack test requirement under section f)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.088 pounds of PE per hour.

Applicable Compliance Method:

Compliance shall be demonstrate based on the stack test requirement under section f)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

0.00036 pounds of Lead (Pd) per hour.

Applicable Compliance Method:

Compliance shall be demonstrate based on the stack test requirement under section f)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from the stack serving this emission unit.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing on this emissions unit.
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE hourly limitation.
  - c. The emission testing shall be conducted to demonstrate compliance with the allowable PE grains per dry standard cubic feet limitation.
  - d. The emission testing shall be conducted to demonstrate compliance the Lead hourly emission rate.
  - e. The following test methods shall be employed to during the mass emission stack testing:
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A; and
    - ii. Lead: Method 12 of 40 CFR Part 60, Appendix A.

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

- f. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) and afterburner are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**25. P907, FC Line 3 Casting System**

**Operations, Property and/or Equipment Description:**

FC Line 3 Casting System

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) and (PTI 05-07140)	Stack emissions from this emissions unit shall not exceed:  Particulate emissions (PE) 0.001 grains per actual cubic feet; and (PE) 0.155 pounds per hour.  Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.  See Sections c)(1), c)(2),
b.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-08(B)	Exempt.  See Section b)(2)a., below.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) The permittee shall operate and maintain this emissions unit along with any capture hood, enclosures, etc... in a manner that minimizes and/or eliminates fugitive emissions.

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

- (2) This emissions unit shall equipped with a hooding and ventilation system that that vents the emissions to a fabric filter system.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 2 to 10 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
- b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
- c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.001 grains of particulate emissions (PE) per actual standard cubic feet.

Applicable Compliance Method:

Compliance shall be demonstrate based on the stack test requirement under section f)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.155 pounds of PE per hour.

Applicable Compliance Method:

Compliance shall be demonstrate based on the stack test requirement under section f)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from the stack serving this emission unit.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing on this emissions unit.
- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE hourly limitation.
  - c. The emission testing shall be conducted to demonstrate compliance with the allowable PE grains per dry standard cubic feet limitation.
  - d. The following test methods shall be employed to during the mass emission stack testing:

- i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A.

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

- e. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) and afterburner are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements

- (1) None.

**26. P908, Dust Storage and Conditioning System**

**Operations, Property and/or Equipment Description:**

Dust Storage and Conditioning System

- 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) and (PTI 05-08004)	The controlled emissions from this emissions unit shall not exceed the following:  Particulate emissions (PE) of 0.01 grains per dry standard cubic feet; or  PE of 0.24 pounds per hour.
b.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any roof vent that emits emissions into the ambient air from this emission unit shall not exceed 20% opacity, as a 6-minute average.
c.	OAC rule 3745-17-08(B)	Exempt.  See Section b)(2)a., below.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(2), below.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

c) Operational Restrictions

- (1) The emissions from the conditioning equipment and waste dust transport containers shall be hooded and vented to a fabric filter system.

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

- (2) This emissions unit shall be equipped with a fabric filter system with design efficiency of 99.0%.

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

- (3) Waste sand, slag, refractory, and run off iron shall be stored in roll off containers. The containers, as well as being hood as required in section c), of this permit, shall be covered when loaded onto trucks for site removal.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

- (1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:
  - a. Emission Limitation:  
  
0.01 grains of particulate emissions (PE) per actual standard cubic feet.

Applicable Compliance Method:

Compliance shall be demonstrate based on the record keeping in section d)(1) and the manufacturer's recommendations, instructions, and operating manual(s) that demonstrate the "design efficiency" of the fabric filters are 99.0%.

If required, compliance shall be determined through a stack test performed in accordance with 40 CFR Part 60, Appendix A, Method 1-5.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.24 pounds of PE per hour.

Applicable Compliance Method:

Compliance shall be demonstrate based on the record keeping in section d)(1) and the manufacturer's recommendations, instructions, and operating manual(s) that demonstrate the "design efficiency" of the fabric filters are 99.0%.

If required, compliance shall be determined through a stack test performed in accordance with 40 CFR Part 60, Appendix A, Method 1-5.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emission point.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**27. P910, FC Holding Furnace**

**Operations, Property and/or Equipment Description:**

Holding furnaces controlled by baghouses.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	<p>The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).</p> <p>The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-5(D).</p>
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	<p>The particulate emissions (PE) from baghouse # 5, which controls emissions from emissions units: P017, P910, P919, and P911, shall not exceed 11.25 tons (PE)/ rolling 12-month period.</p> <p>The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units: P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.</p> <p>The fugitive emissions from P910 shall not exceed 2.48 tons of PE/ rolling 12-month period.</p>

d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the “controlled” potential to emit is less than ten tons per year.

c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (a) The maximum annual operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

The permittee has existing records of the 12-month rolling operating hours; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

[Authority for term: OAC rule 3745-31-05(D)]

- (b) The maximum annual production rate for this emissions unit shall not exceed 110,230 tons of metal processed, based upon a rolling, 12 month summation of the production rates.

The permittee has existing records of the 12-month rolling on the amount of metal processed; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

[Authority for term: OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the total operating hours;
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months;
  - c. the hours that baghouse # 5 was operated;
  - d. the particulate emissions (PE) rate from baghouse # 5, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
  - e. the monthly PE from baghouse #5, in tons, (the summation of:  $(\{("d" \times 72,948 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)\} \times "a") / 2,000 \text{ lbs/ton})$ );

- f. the rolling, 12-month total PE from baghouse # 5. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The permittee shall maintain monthly records of the following information:

- a. the total operating hours;
- b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
- c. the hours that baghouse # 7 was operated;
- d. the particulate emissions (PE) rate from baghouse # 7, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse #7 in tons, (the summation of:  $\{[("d" \times 89,655 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a"} / 2,000 \text{ lbs/ton}\}$ );
- f. the rolling, 12-month total PE from baghouse # 7. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-31-05(D)]

- (3) The permittee shall maintain monthly records of the following information:

- a. the amount of metal employed in this emissions unit, in tons;
- b. the rolling, 12-month total metal employed in this emissions unit. The rolling, 12-month summation of the total sand employed (the total amount of metal employed for the current month ("a") plus the total amount of metal employed for the 11 previous calendar months);
- c. the monthly fugitive PE emissions, in tons, (the summation of:  $\{[(\text{metal processed "a"} \times 0.9 \text{ lbs/ton of metal, Fire SCC 30400303}) \times (1 - \text{hooding capture efficiency (95.0\%), best engineering assumption})] / 2000 \text{ lbs/ton}\}$ ; and
- d. the rolling, 12-month total fugitive PE from this emissions unit. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month ("c") plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-31-05(D)]

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log:
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (c) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all exceedances of combined particulate emissions (PE) from the baghouse #5 which controls emissions from emissions units P017, P910, P919, and, P911 of 11.25 tons (PE)/ rolling 12-month period.
  - b. all exceedances of the combined particulate emissions (PE) from baghouse # 7 , which controls emissions from emissions units P908, P910, P919, P076, and P911 of 13.83 tons (PE)/ rolling 12-month period.

- c. all exceedances of the rolling 12-month period metal employed of 110,230 tons per rolling 12-month period in this emissions unit;
- d. all exceedances of the rolling 12-month period fugitive PE limitation of 2.48 tons per rolling 12-month period from this emissions unit;
- e. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and/or
- f. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
- b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
- c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 5, which controls emissions from emissions units: P017, P910, P919, and P911 shall not exceed 11.25 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 5, in acfm, (72,948, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 7, in acfm, (89,655, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P910, shall not exceed 2.48 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$FER = [(MSR \times Ef) \times (1-CAP)] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum metal processed rate, in tons, (110,230 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (0.9 lbs/ton of metal, Fire SCC 304000303); and

CAP = Assumed capture efficiency, in %, (95.0% (0.950)), from data provided by Honda).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
- a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

**28. P911, FC Transfer Ladles**

**Operations, Property and/or Equipment Description:**

FC Transfer Ladles

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	<p>The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).</p> <p>The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-5(D).</p>
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	<p>The particulate emissions (PE) from baghouse # 5, which controls emissions from emissions units P017, P910, P919, and P911 Transfer Ladles, shall not exceed 11.25 tons (PE)/ rolling 12-month period.</p> <p>The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.</p> <p>The fugitive emissions from P911 shall not exceed 0.83 tons of PE/ rolling 12-month period.</p> <p>See sections b)(2)c., c)(1) and (2), d)(1) thru (3), e)(1), and f)(1)c. thru d., below.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d..	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.  See section d)(4), e)(2), f)(1)f., below.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the “controlled” potential to emit is less than ten tons per year.

c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

The permittee has existing records of the 12-month rolling operating hours; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The maximum annual production rate for this emissions unit shall not exceed 110,230 tons of metal processed, based upon a rolling, 12 month summation of the production rates.

The permittee has existing records of the 12-month rolling on the amount of metal processed; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

[Authority for term: OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the total operating hours;
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
  - c. the hours that baghouse # 5 was operated;
  - d. the particulate emissions (PE) rate from baghouse # 5, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
  - e. the monthly PE from baghouse #5, in tons, (the summation of:  $(\{("d" \times 72,948 \text{ acfm}) \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)\} \times "a") / 2,000 \text{ lbs/ton})$ );

- f. the rolling, 12-month total PE from baghouse # 5. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:

- a. the total operating hours;
- b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months);
- c. the hours that baghouse # 7 was operated;
- d. the particulate emissions (PE) rate from baghouse # 7, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
- e. the monthly PE from baghouse #7 in tons, (the summation of:  $(\{[["d" \times 89,655 \text{ acfm}] \times (60 \text{ mins/hr}) \times (1\text{lb}/7,000)] \times "a" \} / 2,000 \text{ lbs/ton})$ );
- f. the rolling, 12-month total PE from baghouse # 7. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month ("e") plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain monthly records of the following information:

- a. the amount of metal employed in this emissions unit, in tons;
- b. the rolling, 12-month total metal employed in this emissions unit. The rolling, 12-month summation of the total sand employed (the total amount of metal employed for the current month ("a") plus the total amount of metal employed for the 11 previous calendar months);
- c. the monthly fugitive PE emissions, in tons, (the summation of:  $\{[(\text{metal processed "a"} \times 0.6 \text{ lbs/ton of metal, Fire SCC 30400315}) \times (1 - \text{hooding capture efficiency (97.5\%), best engineering assumption})] / 2000 \text{ lbs/ton}\}$ ; and
- d. the rolling, 12-month total fugitive PE from this emissions unit. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month ("c") plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log;
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.
  - d. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. all exceedances of combined particulate emissions (PE) from the baghouse #5 which controls emissions from emissions units P017, P910, P919, and P911 limitation of 11.25 tons (PE)/ rolling 12-month period;
  - b. all exceedances of the combined particulate emissions (PE) from baghouse # 7 (BH-5) , which controls emissions from emissions units P908, P910, P919, P076 and P911 limitation of 13.83 tons (PE)/ rolling 12-month period;
  - c. all exceedances of the rolling 12-month period metal employed of 110,230 tons per rolling 12-month period in this emissions unit;

- d. all exceedances of the rolling 12-month period fugitive PE limitation of 0.83 tons per rolling 12-month period from this emissions unit;
- e. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and/or
- f. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
- b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
- c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 5, which controls emissions from emissions unit P017, emissions unit P910, Holding Furnaces, and the charging and tapping of emissions unit P901, Cupola, P911 Transfer Ladles, shall not exceed 11.25 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 5, in acfm, (72,948, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 7, in acfm, (89,655, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

The fugitive particulate emissions (PE) from emissions unit P911 shall not exceed 0.83 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$FER = [(MSR \times Ef) \times (1-CAP)] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MSR = Maximum metal processed rate, in tons, (110,230 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (0.6 lbs/ton of metal, Fire SCC 304000315); and

CAP = Assumed capture efficiency, in %, (97.5% (0.975)), from data provided by Honda).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of Sections d)(3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**29. P919, Cupola Material Preparation and Handling**

**Operations, Property and/or Equipment Description:**

Charging system

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	<p>The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grains of particulate emissions (PE) per dry standard cubic feet (dscf).</p> <p>The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-05(D).</p>
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	<p>The particulate emissions (PE) from baghouse # 4, which controls emissions from emissions units P020, P902, P087, and P919, shall not exceed 11.53 tons (PE)/rolling 12-month period.</p> <p>The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units: P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.</p> <p>The fugitive emissions from P919 shall not exceed 0.25 tons of PE/rolling 12-month period.</p>

d.	OAC rule 3745-17-08	The permittee is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08 (A), this emission unit is exempt from the requirements of OAC rule 3745-17-08(B).
e.	OAC rule 3745-17-11(B)(1) Figure II curve P-1	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
f.	OAC rule 3745-17-07(A)(1)	Visible fugitive PE shall not exceed 20% opacity as a 6-minute average.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.

b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the "controlled" potential to emit is less than ten tons per year.

c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) The maximum operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

The permittee has existing records of the 12-month rolling operating hours; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The amount of metal processed through this emission unit shall not exceed 110,230 tons per rolling 12-month period.

The permittee has existing records of the 12-month rolling operating hours; therefore, there is no need for first 12 calendar months accumulating limitations to ensure the enforceability.

[Authority for term: OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the hours that baghouse #4 was operated;
  - b. the particulate emissions (PE) rate from baghouse # 4, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
  - c. the monthly PE from baghouse #4 in tons, (the summation of:  $\{[("b" \times 74,731 \times 60 \text{ mins/hr} \times (1\text{lb}/7,000)] \times "a" \} / 2,000 \text{ lbs/ton}$ ); and
  - d. the rolling, 12-month total PE from baghouse #4 The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month (c) plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall maintain monthly records of the following information:
- a. the hours that baghouse #7 was operated;
  - b. the particulate emissions (PE) rate from baghouse # 7, in grains per dry standard cubic feet (g/dscf), 0.005 g/dscf or result from most recent stack test;
  - c. the monthly PE from baghouse #7, in tons, (the summation of:  $\{((\text{"b"} \times 89,655 \text{ acfm}) \times 60 \text{ mins/hr} \times (1\text{lb}/7,000)) \times \text{"a"}\} / 2,000 \text{ lbs/ton}$ ); and
  - d. the rolling, 12-month total PE from baghouse #7. The rolling, 12-month summation of the total amount of PE (the total amount of PE for the current month (c) plus the total amount of PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall maintain monthly records of the following information:
- a. the amount of metal employed in this emissions unit, in tons;
  - b. the rolling, 12-month total metal usage in this emissions unit. The rolling, 12-month summation of the total metal employed (the total amount of metal employed for the current month ("a") plus the total amount of metal employed for the 11 previous calendar months);
  - c. the monthly fugitive PE emissions, in tons, (the summation of:  $\{[(\text{metal usage "a"} \times 0.6 \text{ lbs of PE/ton of metal employed, from Fire SCC 304000315,}) \times (1 - \text{hooding capture efficiency (97.5\%, best engineering assumption)})] / 2000 \text{ lbs/ton}$ ); and
  - d. the rolling, 12-month total fugitive PE from this emissions unit. The rolling, 12-month summation of the total fugitive PE (the total amount of fugitive PE for the current month (c) plus the total amount of fugitive PE for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall maintain monthly records of the following information:
- a. the total operating hours; and
  - b. the rolling, 12-month total operating hours for this emissions units. The rolling, 12-month summation of the total operating hours for this emissions unit (the total operating hours for the current month ("a") plus the total operating hours for the 11 previous calendar months).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (5) The permittee shall maintain monthly records of the following:
- a. the amount of metal processed through this emission unit, in tons; and
  - b. the updated rolling, 12-month summation of the amount of metal processed through this emission unit. This shall include the information for the current month and the preceding eleven calendar months.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (6) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (ie., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operational log. If visible emissions are observed, the permittee shall also note the following in the operational log;
- a. the color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to eliminate the visible emissions.

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (7) The pressure drop across the baghouse(s) shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse(s) is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the combined particulate emissions (PE) from baghouse # 4, which controls emissions from emissions units P020, P902, P087, and P919 of 11.53 tons (PE)/ rolling 12-month period.;
  - b. all exceedances of the combined particulate emissions (PE) from baghouse # 7 , which controls emissions from emissions units P908, P910, P919, P076, and P911 of 13.83 tons (PE)/ rolling 12-month period.;
  - c. all exceedances of the rolling 12-month period metalusage of 110,230 tons of metal per rolling 12-month period in this emissions unit;
  - d. all exceedances of the rolling 12-month period fugitive PE limitation of 0.25tons per rolling 12-month period from this emissions unit;
  - e. all exceedances of the rolling, 12-month period 7,200 operation hour limitation.
  - f. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

The particulate emissions (PE) from baghouse # 4, which controls emissions from emissions units P020, P902, P087, & P919, shall not exceed 11.53 tons (PE)/rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$AER = [(Af \times Ef \times 60 \text{ mins/hr} \times Cf) \times Ho] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse #4, in acfm, (74,731, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of d)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

The particulate emissions (PE) from baghouse # 7, which controls emissions from emissions units P908, P910, P919, P076, and P911, shall not exceed 13.83 tons (PE)/ rolling 12-month period.

The combined rolling 12-month emission limitation is the total sum of the following equation for all of the above listed emissions units:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 7, in acfm, (89,655, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (7,200 hrs, Honda's requested voluntary limitation).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. The fugitive particulate emissions (PE) from emissions unit P919, shall not exceed 0.25 tons (PE)/ rolling 12-month period.

The fugitive PE rolling 12-month emission limitation is the total sum of the following equation:

$$\text{FER} = [(\text{MMP} \times \text{Ef}) \times (1-\text{CAP}) \times (1-\text{Cb})] / 2000\text{lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MMP = Maximum metal processed rate, in tons, (110,230 tons, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (0.6 lbs/ton of metal, Fire SCC 30400315); and

CAP = Assumed capture efficiency, in %, (97.5), from data provided by Honda).

Cb%= Capture/Control of Building (70% from Honda Calculation sheets and best engineering estimate)(Reference: April 10, 1998 Letter to Ironon Iron, Inc from Stephen Giles, Director of Portsmouth Local Air Agency)

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements of d)(3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- e. Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9 as set forth in 40 CFR Part 60 (Appendix on Test Methods).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf..

- a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

- i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the

emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southwest District Office's refusal to accept the results of the emission test(s).

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- g) Miscellaneous Requirements
  - (1) None.

**30. P920, Ferrous Casting Line #3 QCC-2 Melting**

**Operations, Property and/or Equipment Description:**

Line 3 QCC 2 Melt, Electric Holding Furnace, w/ Transfer Ladles equipped with baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-5(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	PE emissions/PM10 shall not exceed 2.51 tons per 12 month rolling period.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emissions unit is controlled by shall not exceed 20% opacity, as a 6-minute average.  See section f)(1)c., below.
f.	OAC rule 3745-17-08(B)	Exempt.  See Section b)(2)a., below.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from since the "controlled" potential to emit is less than ten tons per year

- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- f. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The maximum annual production rate for this emissions unit shall not exceed 12,800 tons of metal processed, based upon a rolling, 12 month summation of the production rates.

[Authority for term: OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the production rate for each month, in tons of metal processed;
- b. the rolling, 12-month summation of the production rates, in tons of metal processed;
- c. the rolling, 12-month summation of the operating hours; and
- d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the operating hours.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month period 12,800 tons of metal processed limitation;
  - b. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and
  - c. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

2.51 tons of particulate emissions (PE)/PM10 per rolling 12-months combined emissions.

The combined hourly and rolling 12-month emission limitation was established by the following methodology:

$$\text{AER} = \{[(\text{BFR} \times \text{Ec} \times \text{TI} \times \text{CONV}) \times \text{AH}] + \{[\text{MAMR} \times (\text{Fce} + \text{Me} + \text{Tpe} + \text{Tfe} + \text{Tte})] \times (1 - \text{Cp}\%)\} / 2000$$

Where:

AER= Annual Emission Rate, tons/yr;

Baghouse Emissions:

BFR = baghouse flow rate (12,002 acfm, from Honda's Calculation Sheets);

Ec = Emission concentration rate (0.005 grain /dscf, from Honda's PTI Application and Calculation Sheets);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Building Emissions:

MAMR = maximum annual metal (iron throughput) rate (12,800 tons/rolling 12-month);

AH = Annual Hours restriction Rate (7,200 hours of operation per rolling 12-months);

Fce = PE emission factor Charging (0.6 lb of PE/ton of metal, from SCC 3-04-003-15, Fire);

Me = Melting Emission Factor (0.9 lbs/ton, from SCC 3-04-003-3, Fire);

Tpe = Tapping Emission Factor (0.1 lbs/ton, Honda's best estimate)

Tfe = Transfer System Emission Factor (0.6 lbs/ton, from SCC 3-04-003-15, Fire);

Tte = Transfer System Tapping Emission Factor (0.1 lbs/ton, Honda estimate);

Cp% = Capture Efficiency of hooding and venting system (95% from Honda's EAC Form); and

$$\text{AER} = \{[(12,002 \text{ acfm} \times 0.005 \text{ g/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 g}) \times 7,200 \text{ hrs/yr}] + [(12,800 \text{ tons/yr} \times (0.6 \text{ lbs/ton} + 0.9 \text{ lbs/ton} + 0.1 \text{ lbs/ton} = 0.6 \text{ lbs/ton})) \times (1 - 0.95 \text{ captured by hooding})]\} / 2000$$

AER = 2.51 tons per rolling 12 month period

Applicable Compliance Method:

Compliance with the above PE limitation is assumed based on continuous compliance with the above listed operational restrictions and the recordkeeping in sections d)(1), (2), and (3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing conducted in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit from each baghouse serving this unit is maintained,(0.005 gr/dscf).

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
- a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**31. P921, FC Line #3 QCC#2 Casting**

**Operations, Property and/or Equipment Description:**

Line III QCC 2 Casting to include Permanent Mold Casting Machine, Pouring Furnace, Pigging Machine and Ancillary Equipment

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-5(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)b., below.
c.	OAC rule 3745-31-05(D)	PE/PM10 emissions shall not exceed 3.35 tons per 12 month rolling period.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.  See section f)(1)c., below.
f.	OAC rule 3745-17-08(B)	Exempt.  See Section b)(2)a., below.

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the federally enforceable potential emissions is less than ten tons per year.

- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- f. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The maximum annual production rate for this emissions unit shall not exceed 12,800 tons of metal processed, based upon a rolling, 12 month summation of the production rates.

[Authority for term: OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:

- a. the production rate for each month, in tons of metal processed;
- b. the rolling, 12-month summation of the production rates, in tons of metal processed;
- c. the rolling, 12-month summation of the operating hours; and
- d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the operating hours.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month period 12,800 tons of metal processed limitation;
  - b. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and
  - c. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation

3.35 tons of particulate emissions (PE)/PM10 per rolling 12-months combined emissions.

The combined hourly and rolling 12-month emission limitation was established by the following methodology:

$$\text{AER} = \{[(\text{BFR} \times \text{Ec} \times \text{TI} \times \text{CONV}) \times \text{AH}] + \{[\text{MAMR} \times (\text{Fce} + \text{Me} + \text{Tpe} + \text{Tte})] \times (1 - \text{Cb}\%)\} + [(\text{MAMR} \times \text{Tfe}) \times (1 - \text{Cb}\%)]\} / 2000$$

Where:

AER= Annual Emission Rate, tons/yr;

Baghouse Emissions:

BFR = baghouse flow rate (10,500 acfm, from Honda's Calculation Sheets);

Ec = Emission concentration rate (0.005 grain /dscf, from Honda's PTI Application and Calculation Sheets);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Building Emissions:

MAMR = maximum annual metal (iron throughput) rate (12,800 tons/rolling 12-month);

AH = Annual Hours restriction Rate (7,200 hours of operation per rolling 12-months);

Fce = PE emission factor Crucible (0.1 lb. of PE/ton of metal, Honda estimate);

Me = Pouring Emission Factor (0.1 lbs/ton, Honda estimate);

Tpe = Pouring Furnace Tapping Emission Factor (0.1 lbs/ton, Honda's best estimate)

Tfe = Ductile System/Inoculation Emission Factor (5.0 lbs/ton, from SCC 3-03-003-22, Fire)

Tte = Transfer System Tapping Emission Factor (0.1 lbs/ton, Honda estimate);

Cp% = Capture Efficiency of hooding and venting system (95% from Honda's EAC Form); and

Cb%= Capture/Control of building enclosure (70%, from Honda's calculation sheets and best conservative engineering estimate available).

$$\text{AER} = \left\{ \left[ (10,500 \text{ acfm} \times 0.005 \text{ g/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb}/7000 \text{ g}) \right] \times 7200 \text{ hrs/yr} + \left[ 12,800 \text{ tons/yr} \times (0.1 \text{ lbs/ton} + 0.1 \text{ lbs/ton} + 5.0 \text{ lbs/ton} + 0.1 \text{ lbs/ton} + 0.1 \text{ lbs/ton}) \right] \times (1 - 0.95) \right\} / 2000$$

AER = 3.35 tons per rolling 12 month period.

Applicable Compliance Method:

Compliance with the above PE limitation is assumed based on continuous compliance with the above listed operational restrictions and the recordkeeping in sections d)(1), (2), and (3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing conducted in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit from each baghouse serving this unit is maintained,(0.005 gr/dscf).

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation

Visible particulate emissions from the baghouse(s) stack(s) shall not exceed 20% percent opacity as a six-minute average.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
- a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.
    - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A
- Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
- d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**32. P922, FC Line #3 QCC#2 Gate Cut**

**Operations, Property and/or Equipment Description:**

Line III QCC 2 Gate Cut to include Gate Cut Machine, Material Handling and Associated Equipment

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
  - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grains of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-5(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See Section b)(2)b., below.
c.	OAC rule 3745-31-05(D)	PE/PM10 emissions shall not exceed 1.70 tons per 12 month rolling period.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).
e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.  See section f)(1)c., below.

f.	OAC rule 3745-17-08(B)	Exempt.  See Section b)(2)a., below.
g.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(3)

(2) Additional Terms and Conditions

- a. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.
- b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from since the "controlled" potential to emit is less than ten tons per year.
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
- d. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf) as a voluntary restriction as proposed by the permittee for purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) and constituting a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). Along with the operational limitations under section c) of this permit, this permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- f. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.

[Authority for term: OAC rule 3745-31-05(A)(3)]

- g. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) The maximum annual operating hours for this emissions unit shall not exceed 7200, based upon a rolling, 12 month summation of the operating hours.

[Authority for term: OAC rule 3745-31-05(D)]

- (2) The maximum annual production rate for this emissions unit shall not exceed 12,800 tons of metal processed, based upon a rolling, 12 month summation of the production rates.

[Authority for term: OAC rule 3745-31-05(D)]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. the production rate for each month, in tons of metal processed;
  - b. the rolling, 12-month summation of the production rates, in tons of metal processed;
  - c. the rolling, 12-month summation of the operating hours; and

- d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the operating hours.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- (2) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

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

- (3) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to eliminate the visible emissions..

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. all exceedances of the rolling, 12-month period 12,800 tons of metal processed limitation;
  - b. all exceedances of the rolling, 12-month period 7,200 operation hour limitation; and

- c. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that:

- a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and
- b. describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

- (1) Compliance with the emission limitation in Section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation

1.70 tons of PE/PM10 per rolling 12-months combined emissions.

The combined hourly and rolling 12-month emission limitation was established by the following methodology:

$$\text{AER} = \{[(\text{BFR} \times \text{Ec} \times \text{TI} \times \text{CONV}) \times \text{AH}] + [\text{MAMR} \times \text{Tte}]\} \times (1 - \text{Cp}\%) / 2000$$

Where:

AER= Annual Emission Rate, tons/yr;

Baghouse Emissions:

BFR = baghouse flow rate (7,502 acfm, from Honda Engineering Coordinator, Barton G. Pinson, e-mail Aug. 25, 2006);

Ec = Emission concentration rate (0.005 grain /dscf, from Honda's PTI Application and Calculation Sheets);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Building Emissions:

MAMR = maximum annual metal (iron throughput) rate (12,800 tons/rolling 12-month);

AH = Annual Hours restriction Rate (7,200 hours of operation per rolling 12-months);

Fce = Fce = PE emission factor Gate Cut (1.7 lbs/ton, Honda's Best Estimate (10% of SCC 30400340)

Cp% = Capture Efficiency of hooding and venting system (95% from Honda's EAC Form); and

$AER = \{[(7,502 \text{ acfm} \times 0.005 \text{ g/dscf} \times 60 \text{ min/hr} \times 1 \text{ lb}/7000 \text{ g}) \times 7200 \text{ hrs/yr}] + [12,800 \text{ tons/yr} \times 1.7 \text{ lbs/ton}] \times [1 - 0.95]\} / 2000$

AER = 1.7 tons per rolling 12 month period

Applicable Compliance Method:

Compliance with the above PE limitation is assumed based on continuous compliance with the above listed operational restrictions and the recordkeeping in sections d)(1), (2), and (3), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouses being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing conducted in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit from each baghouse serving this unit is maintained,(0.005 gr/dscf).

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any stack and/or vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-07(A) and 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the

operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**33. Emissions Unit Group -Gas Soft Heat Treat Furnace: P048,P071,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P048	Gas soft nitriding furnace 1 (existing)
P071	Gas soft nitriding furnace 2 (existing)

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)(1), d)(2), d)(3), d)(4) e)(1) and f)(1)h.

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) and (PTI 05-12591)	Particulate emissions (PE) shall not exceed 0.15 pound per hour.  Nitrogen oxide (NOx) emissions shall not exceed 5.61 pounds per hour.  Carbon monoxide (CO) emissions shall not exceed 2.41 pounds per hour.  Organic compound (OC) emissions shall not exceed 1.62 pounds per hour.  Sulfur dioxide (SO2) emissions shall not exceed 0.003 pound per hour.  Cyanide (CN) emissions shall not exceed 0.07 pound per hour.  Ammonia (NH3) emissions shall not exceed 5.6 pounds per hour.  Visible PE shall not exceed 20% opacity, as a 3-minute average, from any stack.  See Sections b)(2)a., c)(1), d)(5), d)(6), e)(1), f)(1)a. thru f)(1)g., and f)(1)i, below.

b.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-18-06(E)(2)	The SO2 emissions limitation specified by this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-114-01 Ohio Toxics Rule	<p>In order to demonstrate compliance with the "Toxic Air Contaminant Statute", the Director has established, per ORC 3704.03(F)(4)(c), a limit for ammonia, which shall not exceed 134.4 pound(s) per day.</p> <p>This daily allowable emissions rate was calculated by multiplying the approved daily operating schedule submitted in the permit application, by the emission rate modeled (to determine the ground level concentration).</p> <p>[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70</p> <p>See Sections d)(1), d)(2), d)(3), d)(4) e)(1) and f)(1)h., below.</p>

(2) Additional Terms and Conditions

- a. The hourly emissions limitations specified above represent the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-12591]

c) Operational Restrictions

- (1) The permittee shall burn natural gas or propane in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-12591]

d) Monitoring and/or Recordkeeping Requirements

(1) The PTI 05-12591 application for this emissions unit, P048, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

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

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Ammonia;

TLV (mg/m3): 17.41 mg/m3;

Maximum Hourly Emission Rate (lbs/hr): 5.6;

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 211.6 ug/m3;  
and

MAGLC (ug/m3): 414.5

The permittee, having demonstrated that emissions of ammonia, from emissions unit(s) P048, is estimated to be equal or greater than eighty per cent, but less than 100 per cent of the maximum acceptable ground level concentration (MAGLC), shall not operate the emissions unit(s) at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operations, as allowed in this permit; and any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

If the permittee determines that the "Toxic Air Contaminant Statute", ORC 3704.03(F), will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI 05-12591 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.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (4) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

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

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

The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned frequencies for performing the visible emissions checks if operating experience indicates that less frequent visible emissions checks would be sufficient to ensure compliance with the above-mentioned applicable requirements.

[OAC rule 3745-31-05(A)(3)] or if TV [OAC rule 3745-77-07(A)(3)]

- (6) For each day during which the permittee burns a fuel other than natural gas or propane in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[OAC rule 3745-31-05(A)(3)] or if TV [OAC rule 3745-77-07(A)(3)]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
  - a. Each day when a fuel other than natural gas, propane, and/or operation emissions were burned in the this emissions unit
  - b. Visible PE exceeds 20% opacity, as a 3-minute average, from any stack;
  - c. any exceedance of the daily limitation on toxic air emissions or any deviation from a restriction on the process or hours of operation, as established by the Director in order to maintain any toxic air contaminant below its MAGLC; and
  - d. any changes made, during the calendar quarter, to a parameter or value entered into the dispersion model that demonstrate compliance with the "Toxic Air Contaminant Statute".

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], [OAC rule 3745-77-07(A)(3)(c) and [ORC 3704.03(F)].

f) Testing Requirements

(1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

0.15 lb PE/hr

The above limitation is based on the following equation:

$$\text{PER} = [\text{ERht} + (\text{BBTU} \times 1/\text{BCONV} \times \text{EF})] \times (1 + \text{SF})$$

Where:

PER = the maximum hourly PE rate

ERht = 0.1 lb/hr, the test results from similar heat treat source on 2/9/95 at AEP

BBTU = combined burner capacity BTU/hr (5,331,152 BTU/hr)

BCONV = BTU to scf conversion factor (1,020 BTU/scf)

EF = the particulate emission factor of 1.9 lb/mmcf, from AP-42, Table 1.4-2, 7/98

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40

If required, the permittee shall demonstrate compliance with the hourly PE limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:

2.41 lbs CO/hr

The above limitation is based on the following equation:

$$\text{CER} = (\text{ERht} + \text{EReg}) \times (1 + \text{SF})$$

Where:

CER = the maximum hourly CO emission rate

ERht = 1.7 lbs/hr, the test results from similar heat treat source on 10/31/01 at AEP

EReg = 0.02 lb/hr, the test results from similar endothermic generation source on 10/24/01 at AEP

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40

If required, the permittee shall demonstrate compliance with the hourly CO emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 10 as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:

5.6 lbs NO<sub>x</sub>/hr

The above limitation is based on the following equation:

$$\text{NER} = [(\text{ER}_{\text{ht}} + \text{ER}_{\text{reg}}) \times \text{SF}] + (\text{NG} \times \text{EF})$$

Where:

NER = the maximum hourly NO<sub>x</sub> emission rate

ER<sub>ht</sub> = 4.0 lb/hr, the test results from similar heat treat source on 01/30/02 at AEP

ER<sub>reg</sub> = 0.01 lb/hr, the test results from similar endothermic generation source on 10/24/01 at AEP

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40

If required, the permittee shall demonstrate compliance with the hourly NO<sub>x</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 7 as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

1.62 lbs OC/hr

The above limitation is based on the following equation:

$$\text{OER} = (\text{ER}_{\text{ht}} + \text{ER}_{\text{reg}}) \times (1 + \text{SF})$$

Where:

OER = the maximum hourly OC emission rate

ER<sub>ht</sub> = 1.1 lb/hr, the test results from similar heat treat source on 10/31/01 at AEP

EReg = 0.06 lb/hr, the test results from similar endothermic generation source on 10/24/01 at AEP

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 18 or 25, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e. Emission Limitation:

0.003 lbs SO<sub>2</sub>/hr

The above limitation is based on the following equation:

$$SER = (BBTU \times 1/BCONV \times EF)$$

Where:

SER = the maximum hourly SO<sub>2</sub> emission rate

BBTU = combined burner capacity BTU/hr (5,331,152 BTU/hr)

BCONV = BTU to scf conversion factor (1,020 BTU/scf)

EF = the SO<sub>2</sub> emission factor of 0.6 lb/mmcf, from AP-42, Table 1.4-2, 7/98

If required, the permittee shall demonstrate compliance with the hourly SO<sub>2</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 6, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f. Emission Limitation:

0.07 lbs CN/hr

The above limitation is based on the following equation:

$$CNER = (ERht) \times (1 + SF)$$

Where:

CNER = the maximum hourly CN emission rate

ERht = 0.5 lb/hr, the test results from similar heat treat source on 10/31/01 at AEP

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40

If required, the permittee shall demonstrate compliance with the hourly CN emission limitation through emission tests performed in accordance with the California Air Resource Board, Method 426, emission testing. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g. Emission Limitation:

5.6 lbs NH<sub>3</sub>/hr

The above limitation is based on the following equation:

$$\text{NHER} = (\text{ERht}) \times (1 + \text{SF})$$

Where:

NHER = the maximum hourly NH<sub>3</sub> emission rate

ERht = 4.0 lb/hr, the test results from similar heat treat source on 01/30/02 at AEP

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40

If required, the permittee shall demonstrate compliance with the hourly NH<sub>3</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 26 or CTM-027, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1)]

h. Emission Limitation

134.4 pounds of Ammonia per day

The above limitation is based on the following equation:

$$\text{DER} = [(\text{ERht}) \times (1 + \text{SF})] \times 24 \text{ hours per day}$$

Where:

DER = Daily Emission Rate, in pounds per day;

ERht = 4.0 lb/hr, the test results from similar heat treat source on 01/30/02 at AEP; and

SF = the assumed safety factor for variability error of 40% expressed in as fraction, 0.40.

If required, the permittee shall demonstrate compliance with the hourly NH<sub>3</sub> emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4, and 26 or CTM-027, as appropriate. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

Applicable Compliance Method:

Compliance shall be based on the calculations in section d)(1) and the monitoring, record keeping, and reporting requirements with sections d)(2), d)(3) d)(4), and e)(1), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

i. Emission Limitation

Visible particulate emissions from the stack serving this emissions unit shall not exceed 20 percent (20%) opacity as a three-minute average.

Applicable Compliance Method

If required, compliance shall be determined through visible emission observations performed in accordance with U.S. EPA Method 9.

[OAC rule 3745-31-05(A)(3)]

g) Miscellaneous Requirements

(1) None.

**34. Emissions Unit Group -Spin Cast Machine 1 and 2: P078,P079,**

EU ID	Operations, Property and/or Equipment Description
P078	Spincast machine no. 1, preheat torches with hooding, with all emissions venting to a baghouse system
P079	Spincast machine no. 2, preheat torches with hooding, with all emissions vented to a baghouse system

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)	Particulate emissions (PE) shall not exceed 2.34 pounds per hour from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.  Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.  Emissions from the use of natural gas combustion shall not exceed the following for this emissions unit:  Nitrogen oxides (NOx) 0.28 lb/hr; Carbon monoxide(CO) 0.23 lb/hr; Volatile Organic compound (VOC) 0.02 lb/hr; and Sulfur dioxide (SO2) 0.002 lb/hr  See Sections b)(2)a., c)(1) thru c)(4), d)(1) thru d)(5), e)(1), f)(1)a. thru d., f)(1)f. and f)(2), below.

b.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. The hourly limitations specified above represent the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-13485]

c) Operational Restrictions

- (1) This emission unit shall use only detergent based or earthen based mold release agents.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (2) Fuel usage in this emission unit shall be only natural gas.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (3) This emissions unit shall be equipped with hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse.

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

- (4) This emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.004 grains of particulate (PE) emissions per dry standard cubic feet (dscf).

[Authority for term: OAC rule 3745-77-07(A)(1) and PTI 05-13485]

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (2) The permittee shall maintain monthly records of the type of mold release agent employed (i.e., either detergent based or earthen based) in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (3) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack and for any visible fugitive PE from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If the weekly checks show visible emissions that are representative of normal operation for 12 consecutive operating weeks, the required frequency of visible emissions checks may be reduced to monthly. If a subsequent check indicates abnormal visible emissions, the frequency of emissions checks shall revert to weekly until such time there are 12 consecutive operating weeks of normal visible emissions.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (5) For each day during which the permittee burns a fuel other than a gaseous fuel (i.e., natural gas), the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse did not comply with the allowable range;
- b. all periods of time during which any non-detergent based or non-earthen based mold release agent was employed in this emissions unit; and/or

- c. identify each day when a fuel other than natural gas was burned in this emissions unit.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)].

- (2) The permittee shall submit semiannual written reports that:
  - a. identify all days during which any visible PE were observed from any stack serving this emissions unit;
  - b. identify all days during which any visible fugitive PE were observed from any egress point (i.e., building windows, doors, roof monitors, etc...) serving this emissions unit; and
  - c. describe the corrective actions taken to eliminate the visible PE.

These reports shall be submitted to the Ohio EPA, Southwest District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

f) Testing Requirements

- (1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

- a. Emission Limitation:

2.34 lb PE/hr and 0.004 gr/dscf, from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = (BFR)(AV)(BEF)(TI)(CONV)$$

Where:

HER = Hour Emissions Rate, in pounds per hour;

BFR = baghouse flow rate (65,000 acfm);

AV = the air variability factor (105%);

BEF = baghouse efficiency (0.004 grain of PE/dscf);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing under section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

b. Emission Limitation:

0.001 lb of fugitive PE/hr, for emissions unit P078 only

The hourly and annual emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = PER^1 + FER^2$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

PER = Process Fugitive Emissions, in pounds per hour; and

FER = Fuel Combustion Fugitive Emissions, in pounds per hour.

<sup>1</sup>Process fugitive emissions

$$PER = (MMR)(2.2046 \text{ lbs/kg})(PMER)(1 \text{ ton}/2000 \text{ lbs})(SF)(1-CAP)$$

Where:

MMR = maximum metal (iron throughput) rate (1,543 kg/hr);

PMER = PE emission factor (0.33 lb of PE/ton of metal)\*;

SF = safety factor of 2; and

CAP = control device capture efficiency (99.9%)

\*Reference from the Air Emissions from Permanent Mold Castings of Ductile Iron Pipe, Marvin D McKinley, Professor of chemical Engineering, University of Alabama, September 1994).

<sup>2</sup>Natural gas combustion

$$FER = (BBTU)(1/BCONV)(PMEF)(1-CAP)$$

Where:

BBTU = burner Btu/hr (2,760,000 Btu/hr);

BCONV = Btu to scf conversion factor (1,000 Btu/scf);

PMEF = PE factor (1.9 lb of PE/mmscf)\*\*; and

CAP = control device capture efficiency (99.9%).

\*\*AP-42, Table 1.4-2, revised 7/98.

Applicable Compliance Method:

Compliance shall be based on the maximum capacity of 1,543 kg/hr (1.7 tons/hr) and the hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse as required in Section c)(3), in this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

c. Emission Limitations:

0.28 lb NOx/hr

0.23 lb CO/hr

0.02 lb VOC/hr

0.002 lb SO<sub>2</sub>/hr

Applicable Compliance Method:

The hourly allowable emission limitations above were established by multiplying the maximum natural gas usage rate (2,760 cuft/hr) by the emission factor\* for each pollutant, from AP-42, Tables 1.4-1, and 1.4-2, revised 7/98.

\*for NOx: 100 lbs NOx/mm cu. ft.; for CO, 84 lbs CO/mm cu. ft.; for VOC, 5.5 lbs VOC/mm cu. ft.; and for SO<sub>2</sub>, 0.6 lb SO<sub>2</sub>/mm cu. ft.

If required, compliance with the hourly allowable emission limitations above shall be determined in accordance with the appropriate Methods\*\* of 40 CFR Part 60, Appendix .

\*\* For NOx, Methods 1 - 4 and 7; for CO, Methods 1 - 4 and 10; for VOC, Methods 1 - 4 and 25 or 25A, as appropriate; for PM<sub>10</sub>, Methods 1 - 4 and 201; and for SO<sub>2</sub>, Methods 1 - 4 and 6.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

d. Visible Emission Limitations:

Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.

Applicable Compliance Method:

Compliance shall be determined through the record keeping and reporting requirements in Sections d)(4) and e)(2), respectively, of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

e. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.

Applicable Compliance Method:

Compliance shall be determined through the record keeping and reporting requirements in Sections d)(4) and e)(2), respectively, of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

(2) The permittee shall conduct, or have conducted, emission testing for the baghouse to demonstrate compliance with the allowable PE limitations:

- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations, 2.34 pound per hour and 0.004 grains per dry standard cubic feet.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.
  - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

- d. The test(s) shall be conducted while emissions unit's P078, P079, P080, P081, P082, P083, P089, and P090 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- g) Miscellaneous Requirements
  - (1) None.

**35. Emissions Unit Group -Spin Lines: P101,P102,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P101	Spin Line 2 Tube Cutting Machine 5
P102	Spin Line 2 Tube Cutting Machine 6

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
- (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
- (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC paragraph 3745-31-05(A)(3), as effective 11/30/01	The use of a building enclosure and baghouse control system with a maximum emission rate of 0.005 grams of particulate emissions (PE) per dry standard cubic feet (dscf).  The requirements of this rule also include compliance with the requirements and OAC rule 3745-31-05(D).
b.	OAC paragraph 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See section b)(2)b., below.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD)	The particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102, shall not exceed 13.14 tons (PE) per year.  The fugitive emissions from this emissions unit shall not exceed 0.26 tons of PE per year.
d.	OAC rule 3745-17-11(B)(1)	The PE limitation specified by this rule is less stringent than the PE limitation established pursuant to OAC rule 3745-31-05 (D).

e.	OAC rule 3745-17-07(A)(1)	Visible PE emissions from any baghouse vent that this emission unit is controlled by shall not exceed 20% opacity, as a 6-minute average.
f.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(2),below.

(2) Additional Terms and Conditions

- a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulations for NAAQS pollutants less than ten tons per year. However, that rule revision has not yet been approved by the U.S. EPA as a revision to Ohio’s State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to the OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006, version of 3745-31-05, then these emission limits/control measures no longer apply.
  
- b. This paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, as part of the State Implementation Plan, (SIP).  
  
The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the particulate emissions (PE) from this emissions unit since the “controlled” potential to emit is less than ten tons per year.
  
- c. This Permit to Install (PTI) for this emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum allowable emission rate of 0.005 grains of particulate (PE) emissions per dry standard cubic feet (dscf). This permit constitutes a Synthetic Minor under the applicable emission threshold of Prevention of Significant Deterioration (PSD) requirements.  
  
[Authority for term: OAC rule 3745-31-05(A)(3)]
  
- d. This emission unit shall be enclosed (inside a building) in such a manner to minimize or eliminate any emissions that may be emitted through the building exhausts into the ambient air.  
  
[Authority for term: OAC rule 3745-31-05(A)(3)]

- e. Nothing in this permit shall preclude the permittee from routing emissions from this emissions unit to other dust collectors or stacks, or to route emissions from other emissions units to the dust collectors and stacks associated with this emission unit as long as the control device associated the stack it is vented to has demonstrated an emission rate of 0.005 grains of PE/dscf or less.

[Authority for term: OAC rule 3745-31-05(A)(3)]

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

The permittee shall properly operate, and maintain equipment to monitor the pressure drop across the baghouse(s) while the emissions unit is in operation. The monitoring equipment shall be calibrated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. All periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)] and [OAC rule 3745-15-03(C)] and [OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

- (1) Compliance with the emission limitation(s) and operational restriction specified in Sections b)(1) and b)(2) shall be determined in accordance with the following methods:

- a. Emission Limitation:

0.005 grains/ dscf,

Applicable Compliance Method:

Compliance with the above limitations will be verified by periodic stack testing of the baghouse(s) being employed at this facility to minimize and/or eliminate the particulate emissions (PE) from this emissions unit, as required by section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

- b. Potential Baghouse Emission:

The potential particulate emissions (PE) from baghouse # 1, which controls emissions from emissions units, P098, P099, P100, P101, and P102 is 13.14 tons (PE)combined per year.

The potential PE annual emission from baghouse #1 is based on the following equation:

$$\text{AER} = [(\text{Af} \times \text{Ef} \times 60 \text{ mins/hr} \times \text{Cf}) \times \text{Ho}] / 2000$$

Where:

AER = Particulate emissions, in tons per rolling 12 month period;

Af = Maximum Air Flow from Baghouse # 1, in acfm, (70,000, specific acfm rates are from the data provide by Honda);

Ef = Emission factor of the control device, grains of PE per dscf, (0.005 grains/dscf, data from Honda and represents a voluntary restriction that Honda has requested to be limited to);

Cf = Conversion factor, (1 lbs/7,000 grains); and

Ho = Allowable rolling 12-month hours of operation limitation, (8,760 hrs, maximum potential hours per year).

Applicable Compliance Method:

Compliance shall be assumed based on verification of the 0.005 grains/dscf by periodic stack testing in section f)(2), the maximum annual hours of operation at 8,760, and the recordkeeping in section d)(1) and d)(2), of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Potential Fugitive Dust Emission:

The potential fugitive particulate emissions (PE) from this emissions unit is 0.26 tons (PE) per year.

The potential fugitive PE per year is based on the following equation:

$$FER = [(MMR \times 8760 \text{ hrs}) \times Ef] \times (1 - CAP) / 2000 \text{ lbs/ton}$$

Where:

FER = Fugitive Particulate emissions, in tons per rolling 12 month period;

MMR = Maximum metal usage rate, in tons, (3.4 tons/hr, from the data provide by Honda);

Ef = Emission factor, in lbs of PE/ton of metal, (17.0 lbs PE/ton of metal, from from Modern Casting, 1/72); and

CAP = Assumed capture efficiency, in %, (99.9% (0.999), from data provided by Honda).

Applicable Compliance Method:

Compliance has be assumed based on the potential metal throughput not exceeding 3.4 tons per hour. Prior any modification of this emissions unit that would increase the metal through capacity above 3.4 tons per hour, the permittee shall apply for and obtain all applicable air pollution permits.

[Authority for term: OAC rule 3745-77-07(C)(1)]

d. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for any baghouse that controls this emission unit to demonstrate compliance with the allowable PE limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

a. The emission testing shall be conducted within 1 year prior to this facilities' Title V expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations and to verify Honda's estimate emission rates being emitted from the baghouse(s) that are controlling or may be used to control this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations and to verify Honda's estimated emission rate of 0.005 grain /dscf.

i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

d. The test(s) shall be conducted while the emission units being controlled by the baghouse(s) are being operated at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

- (1) None.

**36. Emissions Unit Group -Tube Cutting Machines: P081,P082,P089,P090,**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
P081	Tube cutting machine no. 1, with PE vented to baghouse system (terms in this permit supersede those of PTI 05-11350 issued 6/19/01)
P082	Tube cutting machine no. 2, with PE vented to baghouse system (terms in this permit supersede those of PTI 05-11350 issued 6/19/01)
P089	tube cutting machine no. 3, with PE vented to baghouse system
P090	tube cutting machine no. 4, with PE vented to baghouse system

- 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) and (PTI 05-13485)	<p>Particulate emissions (PE) shall not exceed 2.34 pounds per hour from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.</p> <p>Fugitive PE shall not exceed 0.03 lb/hr from this emissions unit, only</p> <p>Particulate matter less than or equal to an aerodynamic diameter of 10 micrometers (PM-10) shall not exceed 0.003 pounds per hour nor 0.01 tons per year. from emissions unit P081 only.</p> <p>Visible PE shall not exceed 0% opacity, as a 6-minute average, from any stack.</p> <p>See Sections b)(2)a., c)(1), c)(2), d)(1), d)(2), d)(3), e)(1), e)(2), f)(1)a., f)(1)b., f)(1)c., and f)(2), below.</p>

b.	OAC rule 3745-17-07(A)(1)	The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-07(B)(1)	Visible PE shall not exceed 20% opacity, as a 3-minute average, from any fugitive dust emissions point.  See Sections d)(3), e)(3), and f)(1)d., below.
d.	40 CFR Part 64 (Compliance Assurance Monitoring (CAM) for particulate emissions (PE))	See Section d)(3), below.

(a) Additional Terms and Conditions

- a. The hourly emissions limitations specified above represent the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping or reporting is required to demonstrate compliance with these emission limitations.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-13485]

c) Operational Restrictions

- (1) This emissions unit shall be equipped with hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse.

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-13485]

- (2) This emissions unit takes into account the use of a baghouse system, when this emissions unit is in operation, with a maximum emission rate of 0.004 grains of particulate (PE) emissions per dry standard cubic feet (dscf).

[Authority for term: OAC rule 3745-31-05(A)(3) and PTI 05-13485]

d) Monitoring and/or Recordkeeping Requirements

- (1) The pressure drop across the baghouse shall be maintained within the range of 1 to 15 inches of water while any emission unit controlled by the baghouse is in operation. The exception is for the first 45 days following a change of at least 50% of the fabric bags. During that time, the pressure drop shall be maintained below 15 inches of water while any emission unit controlled by the baghouse is in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

- (2) The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once each operating day.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

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

- a. the color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to eliminate the visible emissions..

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
- a. The permittee shall submit quarterly deviation (excursion) reports that identify the all periods of time in which this emissions unit was in operation and the pressure drop across the baghouse(s) did not comply with the allowable range.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

[OAC rule 3745-15-03(B)(1)(a)], [OAC rule 3745-15-03(C)], and [OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

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

f) Testing Requirements

(1) Compliance with the emission limitations specified in Section b)(1) shall be determined in accordance with the following methods:

a. Emission Limitation:

2.34 lb PE/hr and 0.004 gr/dscf, from the ferrous casting line #4 baghouse stack, serving emissions units P078, P079, P080, P081, P082, P083, P089, and P090.

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = (BFR)(AV)(BEF)(TI)(CONV)$$

Where:

HER = Hour Emissions Rate, in pounds per hour;

BFR = baghouse flow rate (65,000 acfm);

AV = the air variability factor (105%);

BEF = baghouse efficiency (0.004 grain of PE/dscf);

TI = time (60 minutes/hr); and

CONV = conversion factor (1 lb/7,000 grains).

Applicable Compliance Method:

The permittee shall demonstrate compliance with the PE limitations based upon the results of emission testing under section f)(2) of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

b. Emission Limitation:

Fugitive PE shall not exceed 0.03 lb/hr from emissions unit P081 only

PM-10 shall not exceed 0.003 pounds per hour from emissions unit P081 only

The hourly emission limitation represents the emissions unit's potential to emit and was established by the following methodology:

$$HER = (MMR)(2.2046 \text{ lbs/kg})(PMER)(1 \text{ ton}/2000 \text{ lbs})(1-CAP)$$

Where:

HER = Hourly Emission Rate, in pounds per hour;

MMR = maximum metal (iron throughput) rate (1,543 kg/hr);

PMER = PE or PM-10 emission factor, as appropriate, (17 lb of PE/ton of metal and 1.7 lb PM-10/ton of metal)\*;

CAP = control device capture efficiency (99.9%)

\* Emission factor reference obtained from U.S. EPA FIRE database (SCC 3-04-003-40)

Applicable Compliance Method:

Compliance shall be based on the maximum capacity being 1,543 kg/hr (1.7 tons/hr) and other equipment to adequately enclose, contain, capture, vent and control PE dust by venting to a baghouse as required in Section c)(1), in this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

c. Emission Limitation:

Visible PE shall not exceed 20% opacity, as a 6-minute average, from any baghouse stack or any roof vent serving this emission unit.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limits based upon the record keeping requirements established in sections d), of this permit.

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

[Authority for term: OAC rules 3745-17-03(B)(1) and 3745-77-07(C)(1)]

(2) The permittee shall conduct, or have conducted, emission testing for the baghouse to demonstrate compliance with the allowable PE limitations:

- a. The emission testing shall be conducted within 1 year prior to the expiration of permit.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable PE limitations, 2.34 pound per hour and 0.004 grains per dry standard cubic feet.
- c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission limitations.
  - i. PE: Methods 1-5 of 40 CFR Part 60, Appendix A

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

- d. The test(s) shall be conducted while emissions unit's P078, P079, P080, P081, P082, P083, P089, and P090 are operating at or near their maximum capacities, unless otherwise specified or approved by the Ohio EPA, Southwest District Office.

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

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

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, Southwest District Office 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, Southwest District Office.

[Authority for term: OAC rule 3745-77-07(C)(1) and PTI 05-13485]

g) Miscellaneous Requirements

- (1) None.