



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

12/28/2015

GRANT MILLIRON  
 MILLIRON RECYCLING, INC.  
 2384 STATE ROUTE 39N  
 MANSFIELD, OH 44903

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0370010212  
 Permit Number: P0119908  
 Permit Type: Initial Installation  
 County: Richland

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

**How to appeal this permit**

The issuance of this PTIO 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  
 77 South High Street, 17th Floor  
 Columbus, OH 43215

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MODELING SUBMITTED
No	SYNTHETIC MINOR TO AVOID TITLE V
No	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

## **How to save money, reduce pollution and reduce energy consumption**

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. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: Ohio EPA-NWDO



**FINAL**

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

Facility ID:	0370010212
Permit Number:	P0119908
Permit Type:	Initial Installation
Issued:	12/28/2015
Effective:	12/28/2015
Expiration:	4/30/2019





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

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**Final Permit-to-Install and Operate**  
MILLIRON RECYCLING, INC.  
**Permit Number:** P0119908  
**Facility ID:** 0370010212  
**Effective Date:** 12/28/2015

## Authorization

Facility ID: 0370010212  
Application Number(s): A0054826  
Permit Number: P0119908  
Permit Description: Installation of an auto shredder residue (ASR) drying plant (30 TPH) consisting of feeder, five conveyors and natural gas or propane dryer w/ cyclone and baghouse in series.  
Permit Type: Initial Installation  
Permit Fee: \$1,250.00  
Issue Date: 12/28/2015  
Effective Date: 12/28/2015  
Expiration Date: 4/30/2019  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

MILLIRON RECYCLING, INC.  
2384 STATE ROUTE 39N  
MANSFIELD, OH 44903

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Permit-to-Install and Operate**  
MILLIRON RECYCLING, INC.  
**Permit Number:** P0119908  
**Facility ID:** 0370010212  
**Effective Date:** 12/28/2015

## Authorization (continued)

Permit Number: P0119908

Permit Description: Installation of an auto shredder residue (ASR) drying plant (30 TPH) consisting of feeder, five conveyors and natural gas or propane dryer w/ cyclone and baghouse in series.

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

<b>Emissions Unit ID:</b>	<b>P902</b>
Company Equipment ID:	P902
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
MILLIRON RECYCLING, INC.  
**Permit Number:** P0119908  
**Facility ID:** 0370010212  
**Effective Date:** 12/28/2015

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

**1. What does this permit-to-install and operate ("PTIO") allow me to do?**

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

**2. Who is responsible for complying with this permit?**

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

**3. What records must I keep under this permit?**

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

**4. What are my permit fees and when do I pay them?**

There are two fees associated with permitted air contaminant sources in Ohio:

PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

**5. When does my PTIO expire, and when do I need to submit my renewal application?**

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

**6. What happens to this permit if my project is delayed or I do not install or modify my source?**

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

**7. What reports must I submit under this permit?**

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

**8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?**

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions of this permit will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

**9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?**

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

**10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?**

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the [DO/LAA] in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

**11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?**

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

**12. What happens if one or more emissions units operated under this permit is/are shut down permanently?**

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emission unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

**13. Can I transfer this permit to a new owner or operator?**

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

**14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?**

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

**15. What happens if a portion of this permit is determined to be invalid?**

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.



**Final Permit-to-Install and Operate**  
MILLIRON RECYCLING, INC.  
**Permit Number:** P0119908  
**Facility ID:** 0370010212  
**Effective Date:** 12/28/2015

## **B. Facility-Wide Terms and Conditions**



**Final Permit-to-Install and Operate**  
MILLIRON RECYCLING, INC.  
**Permit Number:** P0119908  
**Facility ID:** 0370010212  
**Effective Date:** 12/28/2015

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) None.
  - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
    - (1) None.



**Final Permit-to-Install and Operate**  
MILLIRON RECYCLING, INC.  
**Permit Number:** P0119908  
**Facility ID:** 0370010212  
**Effective Date:** 12/28/2015

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



**1. P902, ASR Drying Plant**

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

35 mmBtu/hr natural gas or propane-fired auto shredder residue (ASR) drying plant (30 TPH) with cyclone and baghouse in series

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	<u>ASR drying:</u>  0.01 grain (gr) particulate matter 10 microns or less in size (PM <sub>10</sub> ) per dry standard cubic foot (dscf), 1.37 lbs PM <sub>10</sub> /hr and 2.5 tons PM <sub>10</sub> /yr from baghouse stack  <u>Material handling emissions:</u>  6.57 tons fugitive PM <sub>10</sub> /yr  <u>Emissions from natural gas and propane combustion:</u>  13 lbs nitrogen dioxide (NO <sub>x</sub> )/gal propane and 9.18 tons NO <sub>x</sub> /yr

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>84 lbs carbon monoxide (CO)/mm standard cubic feet (scf) natural gas and 6.13 tons CO/yr</p> <p>0.80 lb volatile organic compounds (VOC)/gal propane and 0.6 ton VOC/yr</p> <p>Best available control measures that are sufficient to minimize and eliminate visible emissions of fugitive dust [See b)(2)b. and b)(2)c.]</p> <p>See b)(2)a. and b)(2)d.</p>
b.	OAC rule 3745-31-05(A)(3), as effective June 30, 2008	<p>0.76 ton PM<sub>10</sub> per month averaged over a 12-month rolling period for fugitive and stack emissions, combined</p> <p>Install a burner designed to meet the following:</p> <p>13 lbs NOx/gal propane;  84 lbs CO/mmscf natural gas; and  0.80 lb VOC/gal propane</p> <p>See b)(2)d. and b)(2)e.</p>
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective June 30, 2008	<p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to VOC, CO, NOx, SO<sub>2</sub> and PM<sub>10</sub> emissions from this air contaminant source since the potential to emit is less than 10 tons/year taking into account the legally and practically enforceable restriction established under OAC rule 3745-31-05(F).</p> <p>See b)(2)f.</p>
d.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule
e.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed 20 percent opacity, as a 3-minute average
f.	OAC rule 3745-17-08(B)	The controlled emissions from the stack shall achieve an outlet emission rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there shall be no visible emissions



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		(whichever is less stringent) from the baghouse stack.  See b)(2)g.
g.	OAC rule 3745-17-11(B)	<u>Baghouse stack:</u>  0.69 lb PE/hour

(2) Additional Terms and Conditions

- a. This permit established the following legally and practically enforceable emissions limitations for this emissions unit. The legally and practically enforceable emission limitations are voluntary restrictions established under OAC rule 3745-31-05(F) and are based in the operational restrictions contained in c)(1) of this permit:
  - i. 0.01 gr PM<sub>10</sub> per dscf, 1.37 lbs PM<sub>10</sub>/hr and 2.5 tons PM<sub>10</sub>/yr from baghouse stack;
  - ii. 6.57 tons fugitive PM<sub>10</sub>/yr from material handling emissions;
  - iii. 13 lbs NOx/gal propane and 9.18 tons NOx/yr from natural gas and/or propane combustion emissions;
  - iv. 84 lbs CO/mmscf natural gas and 6.13 tons CO/yr from natural gas and/or propane combustion emissions; and
  - v. 0.80 lb VOC/gal propane and 0.6 ton VOC/yr from natural gas and/or propane combustion emissions.
- b. The permittee has committed to employ the following control measures for this emissions unit for purposes of ensuring compliance with the above-mentioned applicable requirements:

<b>Material Processing and Handling Operation:</b>	<b>Control Measure(s)*</b>
Batch feeder loading	*maintain a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust
Transfer points: piles to infeed conveyor infeed conveyor to dryer	*maintain a moisture content sufficient to minimize or eliminate visible emissions of fugitive dust



dryer to product conveyors	
Transfer points:  three product conveyors through aspirator to separator/bins	Building enclosure

\*If at any time the moisture content is not sufficient to meet the above applicable requirements, the permittee shall apply water to the area before conducting operations. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. For each material processing and handling operation, the above-identified control measure(s) shall be implemented in the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the material processing and handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- d. Emissions of sulfur dioxide (SO<sub>2</sub>) and PM<sub>10</sub> from natural gas/propane combustion are insignificant and therefore are not included in this permit.
- e. The BAT emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- f. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- g. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from this emissions unit shall meet the following requirements:
  - i. the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and
  - ii. the control equipment for this emissions unit shall achieve an outlet emission rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there shall be no visible PE (whichever is less stringent) from the exhaust stack of this emissions unit.

c) Operational Restrictions

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



- a. The baghouse stack shall achieve an outlet grain loading of 0.01 gr PM<sub>10</sub>/dscf; and
- b. The maximum annual operating hours for this emissions unit shall not exceed 3,650 per year.
- (2) The permittee shall operate the cyclone and baghouse when this emissions unit is in operation.
- (3) The permittee shall burn only natural gas or propane in this emissions unit.
- 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.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(1)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (2) For each material processing and handling operation that is not adequately enclosed, the permittee shall perform inspections of such material processing and handling operations in accordance with the following minimum frequencies in order to determine if control measures need to be implemented:

<u>Material Handling Operation(s)</u>	<u>Minimum Inspection Frequency</u>
All Operations	Once During Each Day of Operation

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance. The inspections shall be performed during representative, normal operating conditions.

- (3) The permittee shall maintain records of the following information for the material processing and handling operations:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the 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.

The information in d)(3)d. shall be kept separately for each material handling operation identified above in b)(2)b., and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

- (4) The permittee shall maintain monthly records of the hours of operation (hours per month and total hours to date from January to December) for this emissions unit.
- (5) The permittee shall document each day whether or not the cyclone and baghouse were in service when the emissions unit was in operation.

e) Reporting Requirements

- (1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall identify in the PER forms the following information concerning inspection requirements during the 12-month reporting period for this emission unit:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, which was not implemented.
- (4) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:

- a. all days during which any visible particulate emissions were observed from the baghouse stack serving this emission unit; and
  - b. any corrective actions taken to eliminate the visible particulate emissions.
- f) Testing Requirements
- (1) 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 60 days after achieving the maximum production rate that the emissions unit will be operated, but no later than 180 days after the initial startup of each emission unit.
    - b. The emission testing shall be conducted to demonstrate compliance with the following emission rate:
      - i. 0.01 gr PM<sub>10</sub>/dscf
    - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

PM<sub>10</sub> – 40 CFR, Part 60, Appendix A, Methods 1-4 and 40 CFR, Part 51, Appendix M, Methods 201/201A and 202

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
    - d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. MSOR is defined as the condition that is most likely to challenge the emission control measures with regards to meeting the applicable emission standard(s). Although it generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test at the MSOR is justification for not accepting the test results as a demonstration of compliance.
    - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the appropriate Ohio EPA District Office or local air agency's refusal to accept the results of the emission test(s).
    - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire

data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

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

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

- a. Emission Limitation:

0.01 grain PM<sub>10</sub>/dscf, 1.37 lbs PM<sub>10</sub>/hr and 2.5 tons PM<sub>10</sub>/year from baghouse stack

Applicable Compliance Method:

The permittee shall determine compliance with the 0.01 grain PM<sub>10</sub>/dscf emissions limitation in accordance with the emission testing requirements in f)(1).

The hourly emission limitation was developed by multiplying the emission limitation by a maximum volumetric flow rate (16,000 scfm), and applying the conversion factors of 60 minutes/hour and 7,000 grains/pound.

The annual emission limitation was developed by multiplying the hourly emission limitation of 1.37 lbs PM<sub>10</sub>/hr by the maximum operating schedule of 3,650 hours per year and then dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the emission limitation of 0.01 grain PM<sub>10</sub>/dscf and the annual hours of operation restriction, compliance with the annual limitation shall also be demonstrated.

- b. Emission Limitation:

6.57 tons fugitive PM<sub>10</sub>/year

Applicable Compliance Method:

The annual fugitive PM<sub>10</sub> limitation was developed by applying the emission factor from AP-42 Chapter 12.10 (1/1995) of 0.6 lb PM<sub>10</sub>/ton for gray iron foundries, Table 12.10-7 for three conveyor transfer points after the dryer, multiplied by a maximum hourly throughput rate of 30 tons/hour, multiplied by a 80% control efficiency\*, multiplied by a maximum operating schedule of 3,650 hours/year and dividing by 2,000 lbs/ton.

\*80% control was applied since the three conveyors located after the dryer will be carrying material which maintains 15% moisture content. The material being processed through transfer points prior to the dryer has a 30% moisture content; therefore, fugitive emissions from these transfer points were assumed to be negligible.

c. Emission Limitation:

NO<sub>x</sub> emissions shall not exceed 13 lbs/gal propane, 9.18 tons/yr and 0.77 ton/month averaged over a twelve-month, rolling period from combustion emissions.

Applicable Compliance Method:

The lbs/gal emissions limitation was established based on the emission factor from AP-42, Table 1.5 (revised 7/2008) as provided by the permittee in permit application #A0054826.

The annual emission limitation was developed by multiplying the maximum heat input from the dryer (0.387 gal/hr) by the emission factor 13 lbs NO<sub>x</sub>/gal from AP-42, Table 1.5 (revised 7/2008), multiplying by the maximum operating schedule of 3,650 hrs/year, dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the annual emission limitation will also be demonstrated.

The monthly emission limitation was developed by dividing the annual emission limitation of 9.18 tons/yr by 1 year/12 months. Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the monthly limitation will also be demonstrated.

d. Emission Limitation:

CO emissions shall not exceed 84 lbs/mmcf natural gas, 6.13 tons/yr and 0.51 ton/month averaged over a twelve-month, rolling period from combustion emissions.

Applicable Compliance Method:

The lbs/mmcf emissions limitation was established based on the emission factor from AP-42, Table 1.4 (revised 7/1998) as provided by the permittee in permit application #A0054826.

The annual emission limitation was developed by multiplying the maximum heat input from the dryer (0.04 mmcf/hr) by the emission factor 84 lbs CO/mmcf from AP-42, Table 1.4 (revised 7/1998), multiplying by the maximum operating schedule of 3,650 hrs/year, dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the annual emission limitation will also be demonstrated.

The monthly emission limit was developed by dividing the annual emission limitation of 6.13 tons/yr by 1 year/12 months. Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the monthly limitation will also be demonstrated.

e. Emission Limitation:

VOC emissions shall not exceed 6.80 lb/gal propane, 0.6 ton/yr and 0.05 ton/month averaged over a twelve-month, rolling period from combustion emissions.

Applicable Compliance Method:

The lbs/gal emissions limitation was established based on the emission factor from AP-42, Table 1.5 (revised 7/2008) as provided by the permittee in permit application #A0054826.

The annual emission limitation was developed by multiplying the maximum heat input from the dryer (0.387 gal/hr) by the emission factor 0.8 lb VOC/gal from AP-42, Table 1.5 (revised 7/2008), multiplying by the maximum operating schedule of 3,650 hrs/year, dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the annual emission limitation will also be demonstrated.

The monthly emission limit was developed by dividing the annual emission limitation of 0.6 ton/yr by 1 year/12 months. Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the monthly limitation will also be demonstrated.

f. Emission Limitation:

0.76 ton PM<sub>10</sub> per month averaged over a 12-month rolling period for fugitive and stack emissions, combined

Applicable Compliance Method:

The monthly combined PM<sub>10</sub> emission limit for stack and fugitive emissions was established by adding the annual stack emission limit of 2.5 tons PE/yr to the annual fugitive emission limit of 6.57 tons PE/yr and then dividing by twelve months/year.

Therefore, provided compliance is shown with the annual operating hours restriction of 3,650, compliance with the ton per month combined stack and fugitive PE limitation shall also be demonstrated.

g. Emission Limitation:

Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as provided by rule.



Applicable Compliance Method:

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

h. Emission Limitation:

0.69 lb PE/hr from the baghouse stack

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the hourly PE limitation by emission testing conducted in accordance with Methods 1 through 5, of 40 CFR, Part 60, Appendix A, as appropriate.

i. Emission Limitation:

The controlled emissions from the stacks shall achieve an outlet emission rate of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there shall be no visible emissions (whichever is less stringent) from the baghouse stack.

Applicable Compliance Method:

Compliance with the requirement for no visible particulate emissions from the exhaust stack, identified in this permit, shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A. If opting to comply with the outlet particulate emissions rate, compliance with the 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases from the stack shall be determined in accordance with Methods 1 through 5, of 40 CFR, Part 60, Appendix A, as appropriate.

j. Emission Limitation:

Visible emissions of fugitive dust from material handling operations shall not exceed 20 percent opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance with the limitation for visible emissions of fugitive dust shall be determined in accordance with the procedures specified in OAC rule 3745-17-03(B)(3).

g) Miscellaneous Requirements

(1) None.