



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Scott J. Nally, Director

3/14/2013

JOHN H BAKER
 FUSION CERAMIC INC
 PO BOX 127
 CARROLLTON, OH 44615

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0210000013
 Permit Number: P0113312
 Permit Type: Renewal
 County: Carroll

Certified Mail

No	TOXIC REVIEW
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	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

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

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

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.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 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, Northeast District Office at (330)425-9171 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



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

Cc: Ohio EPA-NEDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
FUSION CERAMIC INC**

Facility ID:	0210000013
Permit Number:	P0113312
Permit Type:	Renewal
Issued:	3/14/2013
Effective:	3/14/2013
Expiration:	3/14/2023



Division of Air Pollution Control
Permit-to-Install and Operate
for
FUSION CERAMIC INC

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Final Permit-to-Install and Operate
FUSION CERAMIC INC
Permit Number: P0113312
Facility ID: 0210000013
Effective Date: 3/14/2013

Authorization

Facility ID: 0210000013
Application Number(s): A0046956
Permit Number: P0113312
Permit Description: PTIO Renewal permit for four smelters and a pebble mill.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 3/14/2013
Effective Date: 3/14/2013
Expiration Date: 3/14/2023
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

FUSION CERAMIC INC
160 SCIO RD SE
Carrollton, OH 44615

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, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

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


Scott J. Nally
Director



Authorization (continued)

Permit Number: P0113312

Permit Description: PTIO Renewal permit for four smelters and a pebble mill.

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

Emissions Unit ID:	P003
Company Equipment ID:	Harding Co Pebble Mill
Superseded Permit Number:	P0011776
General Permit Category and Type:	Not Applicable

Group Name: Smelters 1-4

Emissions Unit ID:	P001
Company Equipment ID:	Smelter #1
Superseded Permit Number:	02-19790
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	Smelter #3
Superseded Permit Number:	02-19790
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	Smelter #4
Superseded Permit Number:	02-19790
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P005
Company Equipment ID:	Smelter #2
Superseded Permit Number:	02-19790
General Permit Category and Type:	Not Applicable



Final Permit-to-Install and Operate
FUSION CERAMIC INC
Permit Number: P0113312
Facility ID: 0210000013
Effective Date: 3/14/2013

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. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. 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 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 Ohio EPA DAPC, Northeast District Office 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 submitting¹ 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 emissions 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.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).



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
FUSION CERAMIC INC
Permit Number: P0113312
Facility ID: 0210000013
Effective Date: 3/14/2013

B. Facility-Wide Terms and Conditions



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.
2. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart CC: P001, P002, P004, and P005. The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District office or local air agency.



Final Permit-to-Install and Operate
FUSION CERAMIC INC
Permit Number: P0113312
Facility ID: 0210000013
Effective Date: 3/14/2013

C. Emissions Unit Terms and Conditions



1. P003, Harding Co Pebble Mill

Operations, Property and/or Equipment Description:

Mill, Classifier, Cyclone, Dust Collector

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(A)(3)	Particulate emissions (PE) shall not exceed 0.91 lbs/hr and 3.99 TPY. See section b)(2)a. below.
b.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust shall not exceed twenty percent opacity as a three-minute average.
c.	OAC rule 3745-17-08(B)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The ball mill load hoppers shall be covered or closed while the emissions units are in operation.



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 emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

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

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item (d) 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) The permittee shall perform daily checks, when the emissions unit is in operation, of the integrity of the hooding, covering, or enclosure on this emissions unit that is used to reduce fugitive dust emissions. If the hooding, covering, or enclosure on this emissions unit is not functioning properly, this shall be noted in an operations log. The permittee shall also shut down the operation of the emissions unit and make any repairs necessary to restore the integrity of the fugitive dust control aids.

(3) The permittee shall maintain monthly records of the amount of the material grindings processed, in pounds or tons.



e) Reporting Requirements

- (1) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.
- (2) 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 emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
 - b. any corrective actions taken to minimize or eliminate the visible emissions.
- (3) 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 Ohio EPA Northeast District Office.

f) Testing Requirements

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

a. Emission Limitation:

Visible emissions of fugitive dust shall not exceed 20 percent opacity as a three-minute average.

Applicable Compliance Method:

Compliance with the limitation for visible emissions of fugitive dust shall be determined through visible emissions observations performed in accordance U.S. EPA Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

b. Emission Limitation:

PE shall not exceed 0.91 lbs/hr and 3.99 TPY.

Applicable Compliance Method:

Compliance with the hourly emission limitation may be based on a one time calculation by using emission factors from AP-42, Compilation of Air Pollution Emission Factors, Section 11.12 for loading (0.61 lb/ton processed), and from AP-42, Section 11.24 for mixing (2.4 lbs/ton processed), assuming 50% control



Final Permit-to-Install and Operate

FUSION CERAMIC INC

Permit Number: P0113312

Facility ID: 0210000013

Effective Date: 3/14/2013

for the ball mill mixer enclosure [$0.61 + (2.4 \times 0.5) = 1.81$ lbs/ton processed], and the maximum process weight rate from the application.

$E = 1.81 \text{ lbs/ton} \times 0.5 \text{ tons/hr}$, maximum material grindings = 0.91 lbs/hr of PE.

If required, compliance with the hourly emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

Compliance with the annual emission limitation shall be demonstrated by multiplying the emission factor (1.81 lbs/ton) by the annual production rate (summation of section d)(3)), and then dividing by 2000 lbs/ton.

g) Miscellaneous Requirements

(1) None.



2. Emissions Unit Group -Smelters 1-4: P001,P002,P004,P005,

EU ID	Operations, Property and/or Equipment Description
P001	Furnace, Mixer, Mixer Dust Collector
P002	Furnace, Mixer, Mixer Dust Collector
P004	Furnace, Mixer, Mixer Dust Collector
P005	Furnace, Mixer, Mixer Dust Collector

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(A)(3) (PTI 02-19790)	Process Emissions: Particulate Emissions (PE) and particulate matter emissions 10 microns and less (PM10) shall not exceed 1.7 lbs/hr and 7.4 TPY. Nitrogen Oxides (NOx) emissions shall not exceed 4.3 lbs/hr and 18.9 TPY. Carbon Monoxide (CO) emissions shall not exceed 1.3 lbs/hr and 5.7 TPY. See b(2)a. through b(2)d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), 3745-17-10(B)(1), and 3745-17-11(B)(1).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as specified by rule.
c.	OAC rule 3745-17-10(B)(1) OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is equally stringent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 60, Subpart CC (40 CFR 60.290-293)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

- a. When burning the following fuels, the mass emission limitations shall not exceed the accompanying emission levels:

Natural Gas

PE/PM10: 0.5 pound per hour and 1.1 tons per year
 NOx: 0.6 pound per hour and 2.6 tons per year
 CO: 0.5 pound per hour and 2.2 tons per year

#2 Fuel Oil

PE/PM10: 0.5 pound per hour and 1.1 tons per year
 NOx: 0.86 pound per hour and 3.80 tons per year
 SO2: 0.3 pound per hour and 1.37 tons per year

On-Spec Used Oil

PE/PM10: 2.2 pounds per hour and 9.8 tons per year
 NOx: 0.7 pound per hour and 3.0 tons per year
 SO2: 2.3 pounds per hour 10.0 tons per year

- b. The emissions from this emissions unit shall be vented to a baghouse at all times the emissions unit is in operation.
- c. Each shipment of oil burned in this emissions unit shall be “on-specification” (on-spec) oil and shall meet the used oil specifications contained in OAC rule 3745-279-11. The permittee shall determine that the used fuel oil meets these specifications by performing analyses or obtaining copies of analyses or other information from the supplier documenting that the used fuel oil does not exceed (except for flash point which shall not fall below) the following limitations:



Contaminant/Property	Allowable Specifications
arsenic	5 ppm, maximum
cadmium	2 ppm, maximum
chromium	10 ppm, maximum
total halogens	less than 1,000 ppm; or 4,000 ppm maximum if the presumption that the used oil contains hazardous waste is rebutted, as described below
lead	100 ppm, maximum
flash point	100°F, minimum

and shall also not exceed the following maximum PCB and mercury limitations nor fall below the following heating value:

heat content	135,000 Btu/gallon, minimum
PCB's	less than 2 ppm
mercury	1 ppm, maximum

Used oil containing 1,000 ppm or greater total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under paragraph (B)(1) of rule 3745-279-10 of the Administrative Code. The permittee may receive and burn used oil equaling or exceeding 1,000 ppm total halogens, but less than 4,000 ppm, only if the permittee has successfully demonstrated, pursuant to OAC rule 3745-279-63, that the used oil does not contain a listed hazardous waste, by either acquiring and maintaining source process information which demonstrates that the used oil was contaminated by halogenated constituents that would not be listed hazardous waste or by demonstrating that the used oil does not contain significant concentrations of halogens by acquiring and maintaining representative analytical data. Acceptable analytical test protocols that can be used to analyze used oil for halogenated hazardous constituents include SW-846 Test Methods 9075, 9076, and 9077.*

If analytical results demonstrate that used oil containing 1,000 ppm or more total halogens, but less than 4,000 total halogens, does not contain greater than 100 ppm of any individual halogenated hazardous constituent found in the P001, P002, P004 and P005 listings in OAC rule 3745-51-31 and there is no information suggesting that any other halogenated hazardous constituent (e.g., chlorinated pesticides) has come in contact with the oil, then the presumption that the oil contains hazardous waste has been successfully rebutted.** The rebuttable presumption does not apply to either metal working oils/fluids



containing chlorinated paraffins, if processed through a tolling arrangement as described in OAC rule 3745-279-24(C), or used oils contaminated with chlorofluorocarbons removed from refrigeration units.

The burning of used oil not meeting the above limitations is prohibited in this emissions unit and the fuel oil analyses shall document compliance with each limitation before it is burned. The management and burning of used oil is subject to the Standards for the Management of Used Oil, OAC Chapter 3745-279, and the permittee shall document and assure that used oils burned in this emissions unit meet all of the applicable requirements of this Chapter. If the used oil analyses shows total halogens of 1,000 ppm or greater, the permittee shall obtain and maintain all the necessary records to successfully rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste in accordance with this permit.

*EPA publication SW-846, 3rd (or most current) edition, is available from the Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954; 202/512-1800, document number 955-001-00000-1.

**DHWM policy documented in "Used Oil Burners - New Guidance for Rebuttable Presumption", published April 2008 or most current policy.

- d. When oil is used as a fuel, the sulfur content shall not be greater than 0.5 weight percent sulfur.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas, #2 fuel oil, or on-spec used oil in this emissions unit.
- (2) The permittee may not receive or burn any used oil which does not meet the standards in OAC rule 3745-279-11 and the specifications listed in b)(2)e. of this permit without first obtaining a permit-to-install or permit-to-install and operate that authorizes the burning of off-specification used oil. The burning of off-specification used oil, is subject to OAC rules 3745-279-60 through 67, is prohibited as a fuel in this emissions unit.
- (3) The pressure drop across the baghouse shall be maintained within the range of 8 to 14 inches of water while the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records of the following information:
 - a. type of fuel (natural gas, #2 fuel oil, or 'on-spec' waste oil) burned in this emissions unit;
 - b. quantity of fuel burned in this emissions unit, (ft³/day or gallons/day);
 - c. the sulfur content (in percent) and heat content (BTU/gal), if #2 fuel oil and/or 'on-spec' waste oil is used that day, and also the ash content (in percent) for 'on-spec' waste oil;



- d. the heat input for this emissions unit (mmBTU/hr);
 - e. number of hours (hours/day) this emissions unit was in operation;
 - f. identification of the type of raw material, and amounts (weight) of each, charged to this emissions unit;
 - g. total amount (tons) of raw materials charged to this emissions unit, and;
 - h. the average, hourly feed rate (tons/hr) to this emission unit calculated by (g) divided by (e).
- (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 emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.
- If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d above or continue the daily check until the incident has ended. The observer may indicate that the visible emission 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.
- (3) For each shipment of number 2 fuel oil and on-spec used oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittees or oil supplier's analyses for sulfur content and heat content.
- (4) The permittee shall receive and maintain the chemical analyses from the supplier/marketer for each shipment of used oil burned in this emissions unit (or if the oil is generated on site, the permittee shall conduct the chemical analyses), which shall contain the following information:



- a. the date the used oil was received at the facility and the amount received;
- b. the name, address, and U.S. EPA identification number (if applicable) of the generator, transporter, processor/refiner, supplier, and/or marketer;
- c. the results of the following chemical analyses, demonstrating that the used oil meets the standards in OAC rule 3745-279-11:
 - i. arsenic content, in ppm;
 - ii. the cadmium content, in ppm;
 - iii. the chromium content, in ppm;
 - iv. the lead content, in ppm;
 - v. total halogens, in ppm; and
 - vi. the flash point;
- d. where the chemical analysis shows a total halogen content between 1,000 ppm, and below 4,000 ppm, the successful demonstration for the rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste, as described in OAC rule 3745-279-63(C); and
- e. the results of the analyses demonstrating that the used oil meets the heating value and the mercury and PCB limitations contained in this permit.

Each analysis shall be kept in a readily accessible location for a period of not less than 5 years* following the receipt of each shipment of used oil and shall be made available to the Ohio EPA Division of Materials and Waste Management and/or the Division of Air Pollution Control (the appropriate Ohio EPA District Office or local air agency) upon verbal or written request. Any authorized representative of the Ohio EPA may sample or require sampling of any used oil shipments received, stored, or burned by/at this facility for periodic detailed chemical analyses through an independent laboratory.

*The Division of Air Pollution Control requires these records to be maintained for 5 years.

- (5) 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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on daily basis.



e) Reporting Requirements

- (1) 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. It is recommended that the PER is submitted electronically through the Ohio EPA's "e-Business Center: Air Services" although PERs can be submitted via U.S. postal service or can be hand delivered.
- (2) The permittee shall submit quarterly deviation (excursion) reports that identify:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions);
 - d. the magnitude and duration of each deviation (excursion);
 - e. any exceedance of the used oil standards in OAC rule 3745-279-11;
 - f. any occasion where used oil containing 1,000 ppm or more total halogens was burned prior to receiving information demonstrating a successful rebuttal of the presumption that the used oil contains or has been mixed with a listed hazardous waste;
 - g. any exceedance of the limitations for mercury and/or PCBs;
 - h. any deviation from the minimum heat content of 135,000 Btu/gallon; and
 - i. any deviation from the minimum heat content limitation on the oil, Btu/gallon.

If no deviations (excursion) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the Ohio EPA Northeast District Office).

- (3) Where the analytical results for any shipment of used oil burned in this emissions unit establish that the used oil contains total halogens greater than 1,000 ppm, but less than 4,000 ppm, the results of the analysis for total halogens (from the appropriate test Method 9075, 9076, or 9077) and the information obtained to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste shall be



submitted to the appropriate District Office or local air agency. Each rebuttal demonstration shall include:

- a. the date the used oil was received;
- b. the facility location or identification number where the oil was or will be burned;
- c. the amount of oil in the shipment; and
- d. all information, including all the analytical results, relied upon by the permittee to rebut the presumption that the used oil contains or has been mixed with a listed hazardous waste.

The rebuttal demonstrations for used oil received from October to December shall be submitted by January 31; used oil received from January to March, by April 30; used oil received from April to June, by July 31; and used oil received from July to September, by October 31.

f) Testing Requirements

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

a. Emission Limitation:

PE/PM10 shall not exceed 1.7 lbs/hr and 7.4 TPY from process operations.

Applicable Compliance Method:

If required, compliance with this mass emission limitation shall be determined through stack testing per OAC rule 3745-17-03(B)(8) using Methods 1-5 of 40 CFR Part 60, Appendix A.

The TPY emission limitation was developed by multiplying the hourly emission limitation (1.7 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.

b. Emission Limitation:

NOx shall not exceed 4.3 lbs/hr and 18.9 TPY from process operations.

Applicable Compliance Method:

The hourly potential to emit was calculated by multiplying the hourly maximum smelter charge of 500 pounds per hour times the AP 42 emissions factor of 16 pounds of NOx emissions per ton of material feed (Table 11.14-1, 6/97).



If required, compliance with this mass emission limitation shall be determined through stack testing per OAC rule 3745-17-03(B)(8) using Methods 1-4 and 7 or 7E of 40 CFR Part 60, Appendix A.

The TPY emission limitation was developed by multiplying the hourly emission limitation (4.3 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.

c. Emission Limitation:

CO shall not exceed 1.3 lbs/hr and 5.7 TPY from process operations.

Applicable Compliance Method:

The hourly potential to emit was calculated by multiplying the hourly maximum smelter charge of 500 pounds per hour times the AP 42 emissions factor of 4.8 pounds of CO emissions per ton of material feed (Table 11.14-1, 6/97).

If required, compliance with this mass emission limitation shall be determined through stack testing per OAC rule 3745-17-03(B)(8) using Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

The TPY emission limitation was developed by multiplying the hourly emission limitation (1.3 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.

d. Emission Limitation:

PE/PM10 shall not exceed 0.5 lbs/hr and 1.1 TPY while burning natural gas or #2 fuel oil.

PE/PM10 shall not exceed 2.2 lbs/hr and 9.8 TPY while burning 'on-spec' used oil.

Applicable Compliance Method:

The hourly potential to emit was calculated by multiplying the amount of fuel used in a day times the AP-42 emissions factor of 7.6 lb PE per 1,000,000 ft³ for natural gas (Table 1.11-2), 2 lbs/1000 gal for #2 fuel oil (Table 1.3-1), and 66(A) lbs/1000 gal for 'on-spec' waste oil (Table 1.11-2), where A is the average weighted percent ash in the oil.

The TPY emission limitation was developed by multiplying the hourly emission limitation (0.5 and 2.2 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.



e. Emission Limitation:

NOx shall not exceed 0.6 lbs/hr and 2.6 TPY while burning natural gas.
NOx shall not exceed 0.86 lbs/hr and 3.8 TPY while burning #2 fuel oil.
NOx shall not exceed 0.7 lbs/hr and 3.0 TPY while burning 'on-spec' used oil.

Applicable Compliance Method:

The hourly potential to emit was calculated by multiplying the amount of fuel used in a day times the AP-42 emissions factor of 100 lbs/mmft³ for natural gas (Table 1.4-1), 20 lbs/1000 gal for #2 fuel oil (Table 1.3-1), and 16 lbs/1000 gal for 'on-spec' waste oil (Table 1.11-2).

The TPY emission limitation was developed by multiplying the hourly emission limitation (0.6, 0.86, and 0.7 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

CO shall not exceed 0.5 lbs/hr and 2.2 TPY while burning natural gas.

Applicable Compliance Method:

The hourly potential to emit was calculated by multiplying the amount of fuel used in a day times the AP-42 emissions factor of 84 lbs/mmft³ for natural gas (Table 1.4-1).

The TPY emission limitation was developed by multiplying the hourly emission limitation (0.5 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.

g. Emission Limitation:

SO₂ shall not exceed 0.3 lbs/hr and 1.37 TPY while burning #2 fuel oil.
SO₂ shall not exceed 2.3 lbs/hr and 10.0 TPY while burning 'on-spec' used oil.

Applicable Compliance Method:

The hourly potential to emit was calculated by multiplying the amount of fuel used in a day times the AP-42 emissions factor of 107(S) lbs/1000 gal for #2 fuel oil (Table 1.3-1) and 142(S) lbs/1000 gal for 'on-spec' waste oil (Table 1.11-2), where S is the weighted average percent sulfur.



The TPY emission limitation was developed by multiplying the hourly emission limitation (0.3 and 2.3 lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the hourly allowable emission limitation, compliance shall also be shown with the annual emission limitation.

h. Opacity Limitation:

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

Applicable Compliance Method:

If required, 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.

g) Miscellaneous Requirements

- (1) None.