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

1/13/2014

Certified Mail

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

Mr. Trevor Beers
Nucor Steel Marion, Inc.
912 Cheney Avenue
Marion, OH 43301-1801

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0351010017
Permit Number: P0110429
Permit Type: Administrative Modification
County: Marion

Dear Permit Holder:

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

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

Cc: U.S. EPA
Ohio EPA-NWDO

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Nucor Steel Marion, Inc.

Facility ID:	0351010017
Permit Number:	P0110429
Permit Type:	Administrative Modification
Issued:	1/13/2014
Effective:	1/13/2014

Division of Air Pollution Control
Permit-to-Install
for
Nucor Steel Marion, Inc.

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 8
9. Reporting Requirements 8
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 10
14. Public Disclosure 10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P009, Rolling Mill/Reheat Furnace 14

Authorization

Facility ID:	0351010017
Facility Description:	Steel Mill
Application Number(s):	A0045030
Permit Number:	P0110429
Permit Description:	Administrative modification to incorporate revisions to monitoring and record keeping requirements.
Permit Type:	Administrative Modification
Permit Fee:	$500.00
Issue Date:	1/13/2014
Effective Date:	1/13/2014

This document constitutes issuance to:

Nucor Steel Marion, Inc.
912 Cheney Avenue
Marion, OH 43301-1801

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Interim Director

Authorization (continued)

Permit Number: P0110429
Permit Description: Administrative modification to incorporate revisions to monitoring and record keeping requirements.

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

Emissions Unit ID:	**P009**
Company Equipment ID:	Rolling Mill/Reheat Furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

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

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northwest District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to theOhio EPA DAPC, Northwest District Officein accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

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

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d)must be <u>obtained before</u>operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

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

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

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

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

C. Emissions Unit Terms and Conditions

1. P009, Rolling Mill/Reheat Furnace

Operations, Property and/or Equipment Description:

Natural gas fired steel billet reheat furnace

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

(1) b)(1)d., b)(1)h., and d)(7).

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 rules 3745-31-10 through 3745-31-20	Nitrogen oxides (NOx): 0.15 pound per mmBtu heat input and 120.89 tons per rolling, 12-month period Carbon monoxide (CO): 0.084 pound per mmBtu and 67.70 tons per rolling, 12-month period Particulate matter 2.5/10 microns or less in size (PM2.5/PM10)*: 0.0075 pound per mmBtu heat input and 6.04 tons per rolling, 12-month period Volatile organic compounds (VOC): 0.0054 pound per mmBtu heat input and 4.35 tons per rolling, 12-month period Sulfur dioxide (SO2): 0.0006 pound per mmBtu heat input and 0.48 ton per rolling 12-month period See b)(2)b.
b.	ORC 3704.03(T)(4)	See b)(2)c.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)d.
d.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)e.
e.	OAC rule 3745-17-07(A)	See b)(2)f.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	OAC rule 3745-17-11(B)	See b)(2)g.
g.	OAC rule 3745-18-06(E)	See b)(2)h.
h.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(7).

*All emissions of particulate matter are from natural gas combustion and are less than 1 micron in diameter.

(2) Additional Terms and Conditions

a. The NOx and CO emissions limitations apply at all times during operation including startup, shutdown, ramp up, cool down, idling, etc.

b. The permittee shall employ best available control technology (BACT) for this emissions unit. BACT has been determined to be the following:

Pollutant	BACT Requirements
PM2.5 PM10	Use of natural gas for reheat furnace operations.
	Emission standard of 0.0075 lb PM2.5/PM10* per mmBtu heat input.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of PM2.5/PM10.
SO2	Use of natural gas for reheat furnace operations.
	Emission standard of 0.0006 lb SO2 per mmBtu heat input.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of SO2.
CO	Use of natural gas for reheat furnace operations.
	Emission standard of 0.084 pound per mmBtu heat input.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
NOx	Use of natural gas low NOx burners.
	Emission standard of 0.15 pound per mmBtu heat input.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of NOx.
VOC	Use of natural gas for reheat furnace operations.
	Emission standard of 0.0054 lb VOC per mmBtu heat input.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of VOC.

*All emissions of particulate matter from natural gas combustion are less than 1 micron in diameter.

c. The BAT requirements under ORC 3704.03(T) have been determined to be compliance with the pound per hour limitations for NOx and CO established pursuant to OAC rules 3745-31-10 through 3745-31-20.

d. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit for VOC. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20 for NOx and CO; therefore, the permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit for NOx and CO.

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

It should be noted that the emission limitations and control requirements established pursuant to OAC rule 3745-31-10 through 3745-31-20 will remain applicable after the above SIP revisions are approved by U.S. EPA.

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

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006, do not apply to the PM2.5/PM10, VOC, and SO2 emissions from this air contaminant source since the uncontrolled potential to emit (PTE) for PM2.5/PM10, VOC, and SO2 is each less than 10 tons per year.

f. The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply.

g. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rules 3745-31-10 through 3745-31-20.

c) Operational Restrictions

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

d) Monitoring and/or Recordkeeping Requirements

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

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the air/fuel ratio for each individual gas-air flow regulator utilized in the furnace during all periods of operation (including startup, shutdown, ramp up, cool down, idling, etc.). Following compliance testing, the permittee shall collect and record the following when this emissions unit is in operation:

a. for each individual gas-air flow regulator, the average of all recorded air/fuel ratio readings for each rolling, 60-minute period.

(3) The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee. The acceptable operating parameters above shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance.

(4) The monitor for each individual gas-air flow regulator shall meet the following data availability requirements:

a. Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (and shall collect data at required intervals) at all times that the emissions unit is operating.

A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

b. The minimum degree of data availability for each monitor (i.e. for each individual gas-air flow regulator) shall be at least 90%, based on a monthly calculation of the operating time of the monitor. The calculation of data availability shall exclude monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments).

(For example: May has 31 days, or 744 hours. If monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments) equated to 48 hours for an individual monitor, then the 90% standard should be evaluated against 696 hours.

(5) The permittee shall maintain the following information each month as part of compliance with the "General recordkeeping requirements" under 40 CFR 64.9(b)(1):

a. hours of operation of the emissions unit;

b. for each individual monitor while the emissions unit was in operation:

i. hours of monitor operation;

ii. hours of monitor downtime [d)(5)a. minus d)(5)b.i.];

iii. hours of monitor downtime due to monitor malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments);

iv. percentage (%) of data availability calculated by the following:

{d)(5)b.i. – [d)(5)b.ii. – d)(5)b.iii.]}/100

In addition to the records above, the pemittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64.9 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(6) Whenever the monitored value for any parameter varies from the range(s) or minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the excursion. The permittee shall maintain records of the following information for each investigation:

a. the date and time the excursion began;

b. the magnitude of the excursion at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of anexcursion, the permittee shall take prompt corrective action to bring the control equipment parameters within the acceptable range(s), or at or above the minimum limit(s) specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the excursion ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date the corrective action was completed;

h. the date and time the excursion ended;

i. the total period of time (in minutes) during which there was an excursion;

j. the air/fuel ratio reading, immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

These range(s) and/or limit(s) for the operating parameters above are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted range or limit for the operating parameters above based upon information obtained during future performance tests that demonstrate compliance with the allowable NOx and CO emission rates for this/these emissions unit(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated (if necessary) into this permit by means of an administrative modification.

(7) Modeling to demonstrate compliance with, the ”Toxic Air Contaminant Statute”, ORC 3704.03(F)(4)(b), was not necessary because this permit action does not involve an increase in any toxic air contaminant, as defined in OAC rule 3745-114-01, greater than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTI prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

e) Reporting Requirements

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

(2) The permittee shall submit quarterly excursion and deviation reports that identify the excursions in e)(2)a. and the deviations in e)(2)b through e)(2)e.:

a. each period of time (start time and date, and end time and date) when the following operating parameter(s) were outside the appropriate range or limit specified by the manufacturer or outside of the acceptable range for each parameter following any required compliance demonstration:

i. for each individual gas-air flow regulator, the average air/fuel ratio based on each rolling, 60-minute period.

b. each incident of excursion described above where a prompt investigation was not conducted;

c. each incident of excursion described above where prompt corrective action, that would bring the following into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken:

d. each incident of excursion described above where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and recordkeeping requirements of this permit.

e. each incident of deviation where a monitor for an individual gas-air flow regulator failed to achieve a 90% data availability requirement during a calendar month.

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

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 3 months after the issuance of this permit.

b. The emission testing shall be conducted to demonstrate compliance with the:

i. 0.084 lb CO per mmBtu heat input; and

ii. 0.015 lb NOx per mmBtu heat input.

c. The following test methods shall be employed to demonstrate compliance:

i. for the allowable CO emission rate: Methods 1 through 4, and 10 of 40 CFR, Part 60, Appendix A.

ii. for the allowable NOx emission rate: Methods 1 through 4, and 7 of 40 CFR, Part 60, Appendix A.

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

d. The test(s) shall be conducted at a Maximum Source Operating Rate (MSOR), unless otherwise specified or approved by the Ohio EPA, Northwest District Office. 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.

For the reheat furnace a single MSOR does not exist for emissions of both NOx and CO. MSOR for NOx testing would consist of operating the furnace at its maximum material/input rate as indicated above. MSOR for CO testing would involve operation of the furnace from a cold start condition.

e. The permittee shall perform emissions testing for both NOx and CO under the MSOR associated with NOx within 3 months after the issuance of this permit as indicated in f)(1)a., f)(1)b., and f)(1)c. above.

f. The permittee shall perform emissions testing for both NOx and CO under the MSOR for CO during the first routinely scheduled cold start that occurs 45 days after permit issuance. The emissions testing shall be performed in accordance with the requirements of f)(1)b. and f)(1)c. above.

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northwest District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Northwest District Office's refusal to accept the results of the emission test(s).

h. Personnel from the Ohio EPA, Northwest District Office 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.

i. 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 Ohio EPA,Northwest District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA, Northwest District Office.

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

a. <u>Emission Limitations:</u>

0.15 lb NOx/mmBtu heat input and 120.89 tons NOx per rolling, 12-month period

<u>Applicable Compliance Method</u>

Compliance with the lb/mmBtu heat input NOx emission limitation shall be demonstrated through the emission testing requirements contain in f)(1).

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitations

0.084 lb CO/mmBtu heat input and 67.70 tons CO per rolling, 12-month period

Applicable Compliance Method

Compliance with the lb/mmBtu heat input CO emission limitation shall be demonstrated through the emission testing requirements contained in f)(1).

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitations:

0.0006 pound SO2 per mmBtu heat input and 0.48 ton SO2 per rolling, 12-month period

Applicable Compliance Method

Compliance with the lb/mmBtu emission limitation shall be demonstrated by dividing an AP-42, Chapter 1.4 (7/98) emission factor of 0.6 pound of SO2/mmft^{3}by a heat content of 1,020 Btu/ft^3 on natural gas.

If required, the permittee shall demonstrate compliance through emissions testing conducted in accordance with Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

d. Emission Limitations

0.0075 pound PM2.5/PM10 per mmBtu heat input and 6.04 tons PM2.5/PM10 per rolling, 12-month period

Applicable Compliance Method

Compliance with the lb/mmBtu emission limitation shall be demonstrated by dividing an AP-42, Chapter 1.4 (7/98) emission factor of 7.6 pound of PM2.5/PM10 per mmft^3 by a heat content of 1,020 Btu/ft^3 on natural gas.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1-4 of 40 CFR Part 60, Appendix A and Methods 201/201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

e. Emission Limitations:

0.0054 pound VOC per mmBtu heat input and 4.35 tons VOC per rolling, 12-month period

Applicable Compliance Method

Compliance with the lb/mmBtu emission limitation shall be demonstrated by dividing an AP-42, Chapter 1.4 (7/98) emission factor of 5.5 pound of VOC/mmft^{3}by a heat content of 1,020 Btu/ft^3 on natural gas.

If required, the permittee shall demonstrate compliance through emissions testing conducted in accordance with Methods 1-4 and 18, 25, or 25A, as applicable, of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

f. The annual emission limitation was established by multiplying the lb/mmBtu limitation by a maximum heat input rate 184 mmBtu/hr and a maximum operating schedule of 8,760 hours/year, and then by 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the lb/mmBtu limitation compliance with the annual emission limitation shall also be demonstrated.

g) Miscellaneous Requirements

(1) None.