Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

11/18/2010

Certified Mail

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

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0351010017
Permit Number: P0105283
Permit Type: OAC Chapter 3745-31 Modification
County: Marion

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Marion Star. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-NWDO

STAFF DETERMINATION FOR THE APPLICATION TO CONSTRUCT UNDER THE PREVENTION OF SIGNIFICANT DETERIORATION REGULATIONS FOR NUCOR STEEL, MARION MARION COUNTY, OHIO PTI NUMBER P0105283

The Clean Air Act and regulations promulgated thereunder require that major air pollution sources undergoing construction or modification comply with all applicable Prevention of Significant Deterioration (PSD) provisions and nonattainment area New Source Review requirements. The federal PSD rules govern emission increases in attainment areas for major sources, which are sources with the potential to emit 250 tons per year or more of any pollutant regulated under the Clean Air Act, or 100 tons per year or more if the source is included in one of 28 source categories. In nonattainment areas, the definition of a major source is one having at least 100 tons per year potential emissions. A major modification is one resulting in a contemporaneous increase in emissions which exceeds the significance level of one or more pollutants. Any changes in actual emissions within a five-year period are considered to be contemporaneous. In addition, Ohio now has incorporated the PSD and NSR requirements by rule under OAC 3745-31.

Both PSD and nonattainment rules require that certain analyses be performed before a facility can obtain a permit authorizing construction of a new source or major modification to a major source. The principal requirements of the PSD regulations are as follows:

1) Best Available Control Technology (BACT) review - A detailed engineering review must be performed to ensure that BACT is being installed for the pollutants for which the new source is a major source.

2) Ambient Air Quality Review - An analysis must be completed to ensure the continued maintenance of the National Ambient Air Quality Standards (NAAQS) and that any increases in ambient air pollutant concentrations do not exceed the incremental values set pursuant to the Clean Air Act.

For nonattainment areas, the requirements are:

1) Lowest Achievable Emissions Rate (LAER) - New major sources must install controls that represent the lowest emission levels (highest control efficiency) that have been achieved in practice.

2) The emissions from the new major source must be offset by a reduction of existing emissions of the same pollutant by at least the same amount, and a demonstration must be made that the resulting air quality shows a net air quality benefit. This is more completely described in the Emission Offset Interpretative Ruling as found in Appendix S of 40 CFR Part 51.

3) The facility must certify that all major sources owned or operated in the state by the same entity are either in compliance with the existing State Implementation Plan (SIP) or are on an approved schedule resulting in full compliance with the SIP.

For rural ozone nonattainment areas, the requirements are:

1) LAER - New major sources must install controls that represent the lowest emissions levels (highest control efficiency) that have been achieved in practice.

2) The facility must certify that all major sources owned or operated in the state by the same entity are either in compliance with the existing SIP or are on an approved schedule resulting in full compliance with the SIP.

Finally, New Source Performance Standards (NSPS), SIP emission standards and public participation requirements must be followed in all cases.

Site/Facility Description

Nucor Steel, Marion (Nucor Steel) is a steel manufacturing facility located in Marion County. Nucor Steel is a Major PSD facility for nitrogen oxide (NOx), particulate matter (PM)*, particulate matter 10 microns or less in size (PM10), particulate matter 2.5 microns or less in size (PM2.5), volatile organic compounds (VOC), sulfur dioxide (SO2), and carbon monoxide (CO). Marion County is classified as attainment for all pollutants. *PM is also referred to as particulate emissions (PE).

Project Description

Nucor Steel has submitted an application for a permit modification to address the following:

A.

1) A notice of violation for unpermitted modifications of the facility which involved the replacement of the Electric Arc Furnace (EAF) transformer with a larger unit, changes to the oxygen injection system, and fans at the EAF baghouse.

B.

1) A proposed facility wide expansion to allow for an increased production by increasing the capacity of the facility's EAF.

2) To revisit the permitting of the facility prior to Nucor Steel acquisition of the facility to ensure all emissions units modified from the time of acquisition to the present have an effective BACT determination in place thus ensuring proper permitting of the facility.

3) Repermit the facility to establish combined "melt shop" emission limits with total building enclosure;

C.

1) Incorporate MACT, Subpart YYYYY into the permit;

D.

1) This permit action will supersede: PTI #03-16353, issued 8/18/05; and PTI #03-17377, issued 10/30/07.

E.

1) This permit action includes the following emissions units:

F. Emissions Units Incorporated into PTI #P0105283	
F001 – Plant roadways and parking areas	P010 – Noncontact cooling tower (Rolling Mill Pond)
F002 – Scrap storage piles	P011 – Noncontact cooling tower (Melt Shop Spray)
P004 – Continuous casting operations	P012 - Natural gas fired ladle preheater (7.5 mmBtu/hr)
P005 - Natural gas fired ladle preheater (7.5 mmBtu/hr)	P013 - Natural gas fired ladle preheater (8 mmBtu/hr)
P007 - Natural gas fired tundish preheater (4 mmBtu/hr)	P014 - Natural gas fired ladle preheater (8 mmBtu/hr)

P009 – Natural gas fired steel billet reheat furnace	P903 - Electric arc furnace operations (including charging, melting, tapping, slag skimming/handling, etc.)

Process Description

The EAF is used to melt scrap steel to molten steel. During the melting and refining process, carbon, oxygen, lime and other alloying and refining materials are added to the furnace. These various additions to the furnace help to remove impurities in the steel generate foamy slag necessary to ensure electric arc stability, and alter the metallurgy of the final product to meet individual customer specifications. Typical heat cycles are approximately 50 to 60 minutes.

After slag removal, the molten steel is tapped into ladles, where final metallurgy is completed and transported to the continuous caster. The caster forms the steel into billets that are then cut to appropriate length by caster cut-off torches.

The semi-finished products, known as billets, are then transported to the billet yard prior to reheating and hot rolling. The billets are transported from the billet yard to the billet reheat furnace where they are uniformly heated to the proper temperature prior to introduction into the Rolling Mill. The hot billets are rolled into the proper shapes and sizes associated with the specific final product.

Melt shop emissions are captured and collected by the EAF baghouse control system. The system consists of a direct-evacuation (DEC) system, a canopy hood and total building enclosure.

The following sources are controlled by the EAF baghouse control system:
1) P903 – EAF operations
2) P004 - Continuous Caster
3) P005, P012, P013, P014 - Natural gas fired ladle pre-heaters
4) P007 and P015 – Natural gas fired tundish pre-heaters

Per Nucor Steel's PSD application, project emissions were determined by the maximum production capacity of the facility (657,000 tons of steel produced per year) and a rating of 775,000 acfm for the EAF baghouse.

Applicable Regulations

Federal Rules

40 CFR Part 60, Subpart AAa: Emissions unit P903, is subject to the requirements of this rule.

40 CFR Part 63, Subpart YYYYY Emissions unit P903, is subject to the requirements of this rule.

PSD Applicability

In conducting its review and preparing the PSD application, Nucor Steel endeavored to take a critical look at the permitting and equipment changes at the Marion mill beginning with Nucor Steel's purchase of the mill to ensure that both Nucor Steel and Ohio EPA would be confident that all units at the mill, and the mill itself, are fully and properly permitted. Nucor Steel was aware that the Marion mill was re-permitted by the former owner, Marion Steel, shortly prior to Nucor Steel's purchase to make the mill more appealing for purchase by Nucor Steel. Nucor Steel's review has determined that some of the assumptions concerning capacity, equipment, and

emissions performance used by Marion Steel in the re-permitting process have not proven out. Nucor Steel's review also identified, in addition to the transformer replacement, changes to the oxygen injection system and fans at the EAF baghouse that could contribute to an increase in production and/or emissions. Finally, Nucor Steel determined that these changes, plus additional changes set forth in this application, indicate that the Marion steel mill has the potential to achieve much higher peak and overall production rates than indicated in the Marion Steel application. In order to resolve these issues, Nucor Steel Marion, Inc. has taken the following steps in this application:

1) Because some of the assumptions in the Marion Steel application have not proven out, Nucor Steel is uncomfortable relying on those assumptions for future permits. Therefore, Nucor Steel has used documented emission performance data for the Marion steel mill in the two years prior to the Marion Steel netting permit as the baseline for assessing past actual emissions.

2) Nucor Steel has determined that as a result of the transformer replacement, other equipment adjustments, and proposed modifications set forth in this application, the Marion Steel mill has the potential to achieve up to 90 tons of steel per hour (tph) production for short periods, with a weekly average of 75 tph steel.

3) To ensure that all units are properly permitted, Nucor Steel has elected the conservative approach of comparing the emissions from the facility using the 90-tph peak/75-tph average production rate against the pre-2005 actual emissions.
   - Nucor has used the 75-tph rate to determine future potential emissions and for comparison with the pre-2005 actual emissions; and
   - Nucor has used the 90-tph rate for short-term emissions modeling and the 75-tph rate for long-term emissions modeling.

4) As a result of these assumptions, Nucor Steel determined that an emissions increase from pre-2005 emissions to the proposed 75-tph potential-to-emit rate results in a significant emissions increase for PM, PM10 and SO2. Nucor Steel Marion, Inc. considered whether there were any contemporaneous emissions increases and disregarded any contemporaneous emissions decreases except those resulting from this application. As a result, Nucor Steel Marion is submitting a full PSD submittal for changes to the electric arc furnace, reheat furnace, and slag processing operations for the pollutants PM, PM10, and SO2.

5) In addition, Nucor Steel Marion, Inc. has proposed a full best available control technology (BACT) analysis for all pollutants (PM, PM10, PM2.5, CO, NOx, SO2, VOC, lead (Pb), mercury (Hg) and other compounds) that the mill emits in more than negligible quantities for all units modified in the Marion Steel permit (2005) or thereafter to the present time, regardless of whether a significant net emissions increase was shown.

This is a very conservative approach and should fully capture the impact of all process modifications that Nucor has made and intends to take at the Marion mill at this time. The approach also ensures that all units which should undergo PSD review do, in fact, undergo PSD review and that all units that have been modified since Nucor Steel Marion, Inc. first contacted Marion Steel about a possible purchase have an effective BACT, and hence an effective BAT determination, in
place. Nucor Steel Marion, Inc. believes that this approach provides Ohio EPA, Nucor, and the public with the best possible assurance that the mill is properly permitted and reviewed as to its controls and environmental impacts.

Best Available Control Technology (BACT) analysis

BACT Review

The Nucor Steel, Marion facility is subject to PSD regulations which mandate a case-by-case BACT analysis be performed for each proposed new or modified emissions unit at which a net increase of PM, PM10, $PM_{2.5}$, SO_2, Pb VOC and CO will occur. The following emissions units require PM, PM10, $PM_{2.5}$, SO_2, Pb VOC and CO BACT analyses:

The application used a "top-down" approach to determine an appropriate level of control.

Emissions Units Requiring PM, PM10, $PM_{2.5}$, SO_2, Pb VOC and CO BACT	
F001 – Plant roadways and parking areas	P010 – Noncontact cooling tower (Rolling Mill Pond)
F002 – Scrap storage piles	P011 – Noncontact cooling tower (Melt Shop Spray)
P004 – Continuous casting operations	P012 - Natural gas fired ladle preheater (7.5 mmBtu/hr)
P005 - Natural gas fired ladle preheater (7.5 mmBtu/hr)	P013 - Natural gas fired ladle preheater (8 mmBtu/hr)
P007 - Natural gas fired tundish preheater (4 mmBtu/hr)	P014 - Natural gas fired ladle preheater (8 mmBtu/hr)
P009 – Natural gas fired steel billet reheat furnace	P903 - Electric arc furnace operations (including charging, melting, tapping, slag skimming/handling, etc.)

As part of the application for any emissions unit regulated under the PSD requirements, an analysis must be conducted that demonstrates that Best Available Control Technology (BACT) will be employed for every affected pollutant.

Summary of BACT Requirements

BACT is defined as an emission limitation for new or modified sources to be achievable on a case-by-case basis while considering the following three factors:

1) Environmental Impact;
2) Energy Impact; and
3) Economic Impact.

BACT analysis includes air pollution control technologies with the potential to be applied to the emission source for the pollutant under consideration. It is pertinent to point out that BACT must be no less stringent than limitations defined by the standard of a State Implementation Plan, a National Emission Standard for Hazardous Air Pollutants, or a New Source Performance Standard.

The BACT analysis requires a "Top-Down" approach (*NSR Workshop Manual)*, which evaluates the control technology with highest efficiency first, and arrives at the final controls in a 5-step process:

1) Identifying All Applicable Control Technologies;
2) Eliminating Technically Infeasible Control Technologies;
3) Ranking Remaining Control Technologies by Control Effectiveness;
4) Evaluating Cost Effectiveness of Controls and Document Results; and

5) Selecting BACT.

As can be seen from the list above, the final stage of the analysis is the actual selection of the most cost effective air pollution control device. The permitting authority generally sets levels for cost effectiveness. Once a cost-effective control device has been identified for a particular source, that device will be selected as BACT and will be implemented as part of the overall project for that source. If no control systems are deemed to be cost effective, BACT will be no abatement.

BACT Analysis: Meltshop Operations (Ohio EPA emissions unit numbers P004, P005, P007, P012, P013, P014, P015, and P903)

BACT Review:

i. Pollutant	ii. BACT Requirements
iii. iv.	Building enclosure (meltshop) equipped with a canopy hood/baghouse system capable of achieving 100% capture of all emissions within the meltshop building*.
v. PM2.5	viii. Direct-shell evacuation control (DEC) vented to baghouse for EAF (emissions unit P903)
vi. PM10 vii. Pb	ix. Maximum outlet concentration(s) from the baghouse of: x. 0.0049 gr PM2.5/dscf; xi. 0.0052 gr PM10/dscf.
	xii. Visible particulate emissions from the baghouse stack serving the meltshop shall not exhibit 3 percent (3%) opacity of greater, as a six-minute average
	xiii. 0 percent (0%) opacity for visible fugitive particulate emissions from the meltshop building.
	xiv. Scrap management plan to reduce Pb emissions and emission standard of 0.002 lb Pb per ton of steel produced
xv. xvi. SO2	xvii. Emission standard of 0.5 lb per ton of steel produced.
	xviii. Use of natural gas for the continuous casting operations (emissions until P004) and ladle and tundish preheaters.
	xix. The BACT analysis determined that no add-on controls were cost-effective for the reduction of SO2.
xx. xxi. CO	xxii. Emission standard of 2.3 lb per ton of steel produced.
	xxiii. DEC control – CO captured by the DEC is oxidized at the air gap between the DEC elbow and DEC duct.
	xxiv. The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
xxv. xxvi. NOx	xxvii. Emission standard of 0.4 lb per ton of steel produced.
	xxviii. The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
xxix. VOC	xxx. Scrap management plan to reduce VOC emissions and emission standard of 0.13 lb per ton of steel produced.
xxxi. Hg	xxxii. Scrap management plan to reduce Hg emissions and emission standard of 0.00033 lb per ton of steel produced.
xxxiii. The maximum outlet concentrations and emission standards presented in the table above applied to combined emissions from all meltshop operations.	

BACT Analysis: Scrap steel storage piles (Ohio EPA emissions unit number F002)

BACT Review:

xxxiv. Pollutant	xxxv. BACT Requirements
xxxvi. xxxvii. PM2.5 xxxviii. PM10 xxxix. PE	xl. Best available control measures – minimizing drop height
	xli. Visible PE shall not exceed 1 minute during a 60-minute period For storage pile load-in and load-out operations.
	No visible emissions for wind erosion from storage pile surface.

BACT Analysis: Natural gas fired steel billet reheat furnace (Ohio EPA emissions unit number P009)

BACT Review:

xlii. Pollutant	xliii. BACT Requirements
xliv. xlv. PM2.5 xlvi. xlvii. PM10	xlviii. Use of natural gas for reheat furnace operations.
	xlix. Emission standard of 0.0075 lb PM2.5/PM10* per mmBtu heat input.
	l. The BACT analysis determined that no add-on controls were cost-effective for the reduction of PM2.5/PM10.
li. lii. SO2	liii. Use of natural gas for reheat furnace operations.
	liv. Emission standard of 0.0006 lb SO2 per mmBtu heat input.
	lv. The BACT analysis determined that no add-on controls were cost-effective for the reduction of SO2.
lvi. lvii. CO	lviii. Use of natural gas for reheat furnace operations.
	lix. Mass emission rate of 15.46 pounds her hour.
	lx. The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
lxi. lxii. NOx	lxiii. Use of natural gas low NOx burners.
	lxiv. Mass emission rate of 27.60 pounds per hour.
	lxv. The BACT analysis determined that no add-on controls were cost-effective for the reduction of NOx.
lxvi. lxvii. VOC	lxviii. Use of natural gas for reheat furnace operations.
	lxix. Emission standard of 0.0054 lb VOC per mmBtu heat input.
	lxx. The BACT analysis determined that no add-on controls were cost-effective for the reduction of PM2.5/PM10.

BACT Analysis: Noncontact cooling tower – Rolling Mill Pond (Ohio EPA emissions unit number P010)

BACT Review:

lxxi. Pollutant	lxxii. BACT Requirements
lxxiii. lxxiv. PM2.5 lxxv. PM10 lxxvi. PE	lxxvii. A drift eliminator achieving "drift loss" equal to or less than 0.005 percent;
	lxxviii. Mass emission rates of: 0.39 lb PM2.5/PM10 per hour and 0.46 lb PE per hour

lxxi. Pollutant	lxxii. BACT Requirements
	Visible particulate emissions shall not exceed 10% opacity, as a six-minute average.

BACT Analysis: Noncontact cooling tower – Meltshop Spray (Ohio EPA emissions unit number P011)

BACT Review:

lxxix. Pollutant	lxxx. BACT Requirements
lxxxi. lxxxii. PM2.5 lxxxiii. PM10 lxxxiv. PE	lxxxv. A drift eliminator achieving "drift loss" equal to or less than 0.005 percent;
	lxxxvi. Mass emission rates of: 0.19 lb PM2.5/PM10 per hour and 0.22 lb PE per hour
	Visible particulate emissions shall not exceed 10% opacity, as a six-minute average.

BACT Analysis: Plant roadways and parking areas (Ohio EPA emissions unit number F001)

BACT Review:

lxxxvii. Pollutant	lxxxviii. BACT Requirements
lxxxix. xc. xci. PM10 xcii. PE	xciii. Best available control measures – speed reduction, good housekeeping practices, watering, resurfacing, and/or chemical stabilization
	No visible PE except for one minute during any 60-minute period from any paved roadway/parking area.
	No visible PE except for three minutes during any 60-minute period from any unpaved roadway/parking area.

Modeling

Air dispersion modeling was performed for PM2.5, PM10, and SO2 emissions from the meltshop operations. In addition, the air toxic pollutants of manganese and mercury were also evaluated. AERMOD and Building Profile Input Program (BPIP) Prime models were used by Nucor Steel for their dispersion modeling analysis. Modeling demonstrated that the NOx and SO2 concentrations were below the full NAAQS for PM2.5, PM10, and SO2 allowed by the U.S. EPA. The predicted ambient concentrations of air toxics results showed that the concentration for mercury was below the applicable pollutant specific MAGLC. The concentration for manganese resulted in an ambient impact below U.S. EPA's "Regional Screening Level" of 0.05 ug/m^3 for manganese.

Conclusions

Based upon the analysis of the permit to install application and it's supporting documentation provided by Nucor Steel, the Ohio EPA staff has determined that the proposed increase will comply with all applicable State and federal environmental regulations and that the requirements for BACT are satisfied. Therefore, the Ohio EPA staff recommends that a permit to install be issued to Nucor Steel Marion.

Marion County

PUBLIC NOTICE PUBLIC HEARING
ISSUANCE OF DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Nucor Steel Marion, Inc.

Issue Date: 11/18/2010
Permit Number: P0105283
Permit Type: OAC Chapter 3745-31 Modification
Permit Description: Modification involving increase in facility steel production capacity.
Facility ID: 0351010017
Facility Location: Nucor Steel Marion, Inc.
912 Cheney Avenue,
Marion, OH 43301-1801
Facility Description: Steel Mills

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Modification of the air contaminant source may proceed upon final issuance of the PTI.

An information session and public hearing on this permit is scheduled for Monday, December 20, 2010 at 6:30PM in at the Marion City Council Chambers, 233 West Center Street, Marion, Ohio 43302. A presiding officer will be present and may limit oral testimony to ensure all parties are heard. Written comments may also be submitted but must be received by December 21, 2010. Comments received after this date will not be considered a part of the official record.

Comments on this permit, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Jan Tredway at Ohio EPA DAPC, Northwest District Office, 347 North Dunbridge Road, Bowling Green, OH 43402 or (419)352-8461. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio Environmental Protection Agency

DRAFT

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

Facility ID: 0351010017
Permit Number: P0105283
Permit Type: OAC Chapter 3745-31 Modification
Issued: 11/18/2010
Effective: To be entered upon final issuance

Ohio Environmental Protection Agency

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

Table of Contents

Authorization

Facility ID: 0351010017
Facility Description: Steel Mill
Application Number(s): 0038104, A0038519, A0040626, A0040654
Permit Number: P0105283
Permit Description: Modification involving increase in facility steel production capacity.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $7,850.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 11/18/2010
Effective Date: To be entered upon final issuance

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0105283
Permit Description: Modification involving increase in facility steel production capacity.

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

Emissions Unit ID:	**F001**
Company Equipment ID:	Vehicular Traffic
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**F002**
Company Equipment ID:	Scrap Pile
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P009**
Company Equipment ID:	Rolling Mill/Reheat Furnace
Superseded Permit Number:	03-17377
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P010**
Company Equipment ID:	Z022
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P011**
Company Equipment ID:	Z023
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Meltshop Operations

Emissions Unit ID:	**P004**
Company Equipment ID:	Continuous Caster
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	Ladle Preheat furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	Tundish Preheat furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	Z025
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	Z026
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P014**
Company Equipment ID:	Z027

Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P015**
Company Equipment ID:	Z028
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P903**
Company Equipment ID:	Elec. Arc Furnace #3
Superseded Permit Number:	03-16353
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) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

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

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

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

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

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

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.
Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

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

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

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

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

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

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

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

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

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

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

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

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.

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

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a 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 the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

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

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The 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.

2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart YYYYY, National Emission Standards for Hazardous Air Pollutants for Area Sources, Electric Arc Furnace Steelmaking Facilities: P903. The complete MACT requirements, including the MACT General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

   The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart YYYYY. The permittee shall also comply with all applicable requirements of 40 CFR Part 63, Subpart A (General Provisions) as identified in Table 1 of 40 CFR Part 63, Subpart YYYYY. Compliance with all applicable requirements shall be achieved by the dates set forth in 40 CFR Part 63, Subpart YYYYY, and Subpart A.

   40 CFR Part 63, Subpart YYYYY contains MACT Standards for the control of Mercury and generally achievable control technology (GACT) standards for hazardous air pollutants other than Mercury. Ohio EPA was delegated authority of MACT standards by the U.S. EPA, but it should be noted that the authority to implement the GACT standards currently resides with the U.S. EPA.

4. Within 60 days of the effective date of this permit, the permittee shall submit to the Ohio EPA a proposal to install and operate an ambient monitoring station. The ambient monitoring station shall be installed and operated for purposes of gathering air quality data concerning concentrations of manganese (Mn) and mercury (Hg). The ambient monitoring proposal shall include a meteorological station. All air quality monitors installed as part of the proposal shall be sited and operated in accordance with all Ohio EPA and U.S. EPA regulations. The ambient monitoring station proposal will require the approval of the Ohio EPA.

C. Emissions Unit Terms and Conditions

1. F001, Vehicular Traffic

Operations, Property and/or Equipment Description:

Plant roadways and parking areas

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)c.

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	Fugitive particulate emissions (PE)*: 30.64 tons per rolling, 12-month period Fugitive particulate matter 10 microns or less in size (PM10): 5.93 tons per rolling, 12-month period <u>Paved Roadways:</u> No visible PE, except for one minute during any 60-minute period. <u>Unpaved Roadways:</u> no visible PE, except for three minutes during any 60-minute period. best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust See b)(2)c. through b)(2)h.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(B)	See b)(2)i.
e.	OAC rule 3745-17-08(B)	See b)(2)j.

*PE is inclusive of PM10.

(2) Additional Terms and Conditions

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

Pollutant	BACT Requirements
PM10/PE	Best available control measures – speed reduction, good housekeeping practices, watering, resurfacing, and/or chemical stabilization
	No visible PE, except for one minute during any 60-minute period from any paved roadway/parking area.
	No visible PE, except for three minutes during any 60-minute period from any unpaved roadway/parking area.

*PE is inclusive of PM10.

b. 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 PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; 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.

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.

c. 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 PM10 emissions from this air contaminant source since the potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

d. The paved and unpaved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

all paved and unpaved roadways and parking areas

e. The permittee shall employ best available control measures on all paved and unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with speed reduction, good housekeeping practices, watering, resurfacing, and/or chemical stabilization at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

f. Any paved and unpaved roadway or parking area which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled using appropriate dust control measures for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to a visible emission limitation of no visible particulate emissions, except for one minute during any 60-minute period.

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

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

i. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), the emissions unit is exempt from the requirements of OAC rule 3745-17-08.

j. Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Except as otherwise provided in this section, the permittee shall perform inspections of each roadway and parking area in accordance with the following frequencies:

roadways and parking areas:	minimum inspection frequency:
all paved and unpaved roads and parking areas	daily

(2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

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

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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 appropriate District Office or local air agency).

f) Testing Requirements

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

a. Emission Limitations:

5.93 tons fugitive PM10 per rolling, 12-month period30.64 tons fugitive PE per rolling, 12-month period

Applicable Compliance Method:

Compliance with the emission limitations above shall be determined by using the emission factor equations in Section 13.2.2 of Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for unpaved roadways [Section 13.2.1 for paved roadways]. Should further updates in AP-42 occur, the most current equations shall be used. These emission limits were based on a maximum vehicle miles travelled of 8,375 miles/year, and an 80% control efficiency for the reduction of fugitive emissions.

b. Emission Limitations:

No visible fugitive PE from unpaved roadways and parking areas, except for a period of time not to exceed three minutes during any 60-minute observation period.

No visible fugitive PE from paved roadways and parking areas, except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitations listed above shall be determined through visible emission observations performed in accordance with U.S. EPA Method 22 of 40 CFR Part 60 Appendix A.

g) Miscellaneous Requirements

(1) None.

2. F002, Scrap Pile

Operations, Property and/or Equipment Description:

Scrap steel storage piles

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)c.

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	Fugitive particulate emissions (PE)*: 0.43 ton per rolling, 12-month period Fugitive particulate matter 10 microns or less in size (PM10): 0.22 ton per rolling, 12-month period Fugitive particulate matter 2.5 microns or less in size (PM2.5): 0.10 ton per rolling, 12-month period Visible PE shall not exceed 1 minute during a 60-minute period for storage pile(s) load-in and load-out operations No visible emissions from wind erosion from the surface of the storage piles Best available control measures that are sufficient to eliminate visible PE of fugitive dust (See b)(2)d. through b)(2)h.)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(B)	See b)(2)i.
e.	OAC rule 3745-17-08(B)	See b)(2)j.

*PE is inclusive of PM2.5/PM10.
**PM10 is inclusive of PM2.5.

(2) Additional Terms and Conditions

a. 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 PE	Best available control measures – minimizing drop height
	Visible PE shall not exceed 1 minute during a 60-minute period For storage pile load-in and load-out operations.
	No visible emissions for wind erosion from storage pile surface.

*PE is inclusive of PM2.5/PM10.
**PM10 is inclusive of PM2.5.

b. 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 PM2.5/PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; 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.

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.

c. 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 emissions from this air contaminant source since the potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as

total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

d. The permittee shall employ best available control measures meeting BACT requirements for the Scrap Storage Piles and scrap handling operations (emissions unit F002). BACT has been determined to be the following; minimizing drop height as well as compliance with sections b)(2)e. through f. below:

e. The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to minimizing drop height, to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

f. The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

g. The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile at all times.

h. The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the inherent nature of the scrap material in the storage pile will result in no visible emissions from wind erosion for the surface of all storage piles. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

i. This emissions unit is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), the emissions unit is exempt from the requirements of OAC rule 3745-17-08.

j. Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) does not apply because OAC rule 3745-17-08 is not applicable.

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 fugitive particulate emissions from the following scrap storage piles/operations:

a. load-in operations for all scrap storage piles;

b. load-out operations for all scrap storage piles;

c. loading of charge buckets:

d. wind erosion from all scrap storage piles;

The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. The location and color of the emissions;

b. The total duration of any visible emissions incident; and

c. Any corrective actions taken to minimize or eliminate the visible emissions.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation reports that:

a. identify all days during which any visible fugitive particulate emissions were observed from the scrap storage piles/operations; and

b. describe any corrective actions taken to eliminate the visible fugitive particulate emissions.

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 appropriate District Office or local air agency).

f) Testing Requirements

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

a. Emission Limitations:

0.43 ton fugitive PE per rolling, 12-month period;

0.22 ton fugitive PM10 per rolling, 12-month period;

0.10 ton fugitive PM2.5 per rolling, 12-month period

Applicable Compliance Method:

Compliance with fugitive limitations above for PE, PM10 and PM2.5 shall be determined by multiplying the following AP-42 emission factors (Table 12.5-4, 10/86) by a maximum scrap throughput of 722,700 tons and a maximum of (4) handling operations, and then dividing by 2000 lbs/ton:

AP-42 Emission Factors

PE: 0.0003 lb/ton

PM10: 0.00015 lb/ton

PM2.5: 0.000043 lb/ton

b. Emission Limitations:

Visible PE shall not exceed 1 minute during a 60-minute period for storage pile(s) load-in and load-out operations.

No visible emissions from wind erosion from the surface of the storage piles.

Applicable Compliance Method:

Compliance with the visible PE limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

3. 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)(6).

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): 27.60 pounds her hour and 120.89 tons per rolling, 12-month period Carbon monoxide (CO): 15.46 pounds per hour and 67.72 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.
f.	OAC rule 3745-17-11(B)	See b)(2)g.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	OAC rule 3745-18-06(E)	See b)(2)h.
h.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(6).

*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 operation of the reheat furnace results in the fluctuation of emissions over time and as such the hourly NOx and CO emission limitations have been established on the basis of a 24-hour block averaging period. Compliance with the hourly emission limitations shall be demonstrated through the use of continuous emission monitors.

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.
	Mass emission rate of 15.46 pounds her hour.
	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.
	Mass emission rate of 27.60 pounds per hour.
	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 PM2.5/PM10.

*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.

i. Each continuous NOx monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NOx monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NOx emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a

logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

j. Each continuous carbon monoxide (CO) monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a and 6. At least 45 days before commencing certification testing of the continuous CO monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of CO emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

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) Prior to the installation of the continuous NO_x monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NO_x monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(3) The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_x emissions from this emissions unit in units of the applicable standard(s).

The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NO_x monitoring system including, but not limited to:

a. emissions of NO_x in parts per million on an instantaneous (one-minute) basis;

b. emissions of NO_x in pound per hour (average of rolling 24 block) and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_x monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_x monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_x monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

(4) Prior to the installation of the continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate). The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specifications 4 or 4a and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(5) The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour (average of rolling 24 block) and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

(6) 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 comply with the following quarterly reporting requirements for the emissions unit and its continuous NO_x monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA

District Office or local air agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NO_x and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NO_x emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NO_x monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. unless previously submitted, results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO_x monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NO_x monitoring system, emissions unit, and/or control equipment;

xii. xii. the date, time, and duration of any downtime** of the continuous NO_x monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

f) Testing Requirements

(1) Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous NO_x monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NO_x monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the NO_x emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and

through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

(2) Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

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

a. Emission Limitations:

27.60 lbs NOx/hr and 120.89 tons NOx per rolling, 12-month period

Applicable Compliance Method

Compliance with the lbs/hr NOx emission limitation shall be demonstrated through the operation of the continuous emissions monitor and the monitoring and record keeping requirements established in section d)(3) of this permit. If required, the permittee shall demonstrate compliance through emissions testing conducted in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was established by multiplying the lb/hr limitation by 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/hr limitation compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitations

15.46 lbs CO/hr and 67.72 tons CO per rolling, 12-month period

Applicable Compliance Method

Compliance with the lbs/hr CO emission limitation shall be demonstrated through the operation of the continuous emissions monitor and the monitoring and record keeping requirements established in section d)(5) of this permit. If required, the permittee shall demonstrate compliance through emissions testing conducted in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office.

The annual emission limitation was established by multiplying the lb/hr limitation by 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/hr 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.

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.

4. P010, Z022

Operations, Property and/or Equipment Description:

Noncontact cooling tower (Rolling Mill Pond)

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)c.

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	Particulate matter 2.5/10 microns or less in size (PM2.5/PM10)*: 0.39 pound per hour and 1.71 tons per rolling, 12-month period Particulate emissions (PE)**: 0.46 pound per hour and 2.01 tons per rolling, 12-month period Visible PE shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.

*All emissions of particulate matter are considered to be PM2.5 or less.
**PE is inclusive of PM2.5/PM10.

(2) Additional Terms and Conditions

a. 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 PE	A drift eliminator achieving "drift loss" equal to or less than 0.005 percent;
	Mass emission rates of: 0.39 lb PM2.5/PM10 per hour and 0.46 lb PE per hour
	Visible PE shall not exceed 10% opacity, as a six-minute average.

*All emissions of particulate matter are considered to be PM2.5 or less.

b. 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 PM2.5/PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; 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.

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.

c. 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 emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

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

e. 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 maintain the total dissolved solids (TDS) content of the circulating cooling water at 2,650 mg/L or less.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall determine the TDS content, in mg/L, of the cooling tower water in accordance with the following:

a. Conductivity shall be used to determine the TDS content of the cooling tower water based on an established correlation (or index) between TDS and conductivity of the cooling water.

b. The permittee shall properly install, operate, and maintain equipment to continuously monitor and electronically record the conductivity of the cooling tower water. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

c. The permittee shall employ a computerized data management system to determine the conductivity based on a monthly average of the electronically recorded information.

d. If the continuous conductivity monitor malfunctions or is otherwise not operational for greater than a 24-hour period:

i. The permittee shall notify the Ohio EPA district office or local air agency of such malfunction as soon as practicable, but not later than twenty-four hours after the discovery of the event. Notification shall take the form of a telephone call, fax, or other electronic notification.

ii. The duration of the equipment malfunction shall be recorded.

iii. The permittee shall perform and record daily conductivity tests of samples from the cooling tower water until the malfunction is resolved. The results of the samples shall be applied to the monthly conductivity calculation.

iv. The Ohio EPA district office or local air agency shall be notified when the condition causing the malfunction was corrected and the equipment is again in operation. Notification shall take the form of a telephone call, fax, or other electronic notification and shall occur as expeditiously as practicable, but no later than two weeks after the correction has occurred.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the TDS content requirement.

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 appropriate District Office or local air agency).

f) Testing Requirements

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

a. Emission Limitations:

0.39 pound PM2.5/PM10 per hour and 1.71 tons PM2.5/PM10 per rolling, 12-month period

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (225,000 gallons/hr) and by the maximum TDS content (2,650 mg/L), a 0.85 PM2.5/PM10 fraction*, and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

If required, the permittee shall submit a testing proposal to demonstrate that the maximum drift loss does not exceed 0.005 percent.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

*Reference - “Calculating Realistic PM10 Emissions from Cooling Towers, Abstract No. 216, Session No. AM-1b, Greystone Environmental Consultants, Inc., 650 University Avenue, Suite 100, Sacramento, California 95825, June 2001.

b. Emission Limitations:

0.46 pound PE per hour and 2.01 tons PE per rolling, 12-month period

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (225,000 gallons/hr) and by the maximum TDS content (2,650 mg/L), and, then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

5. P011, Z023

Operations, Property and/or Equipment Description:

Noncontact cooling tower (Meltshop Spray)

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

(1) b)(1)c.

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	Particulate matter 2.5/10 microns or less in size (PM2.5/PM10)*: 0.19 pound per hour and 0.83 ton per rolling, 12-month period Particulate emissions (PE)**: 0.22 pound per hour and 0.96 ton per rolling, 12-month period Visible PE shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.
d.	OAC rule 3745-17-07(A)(1)	See b)(2)d.
e.	OAC rule 3745-17-11(B)	See b)(2)e.

*All emissions of particulate matter are considered to be PM2.5 or less.
**PE is inclusive of PM2.5/PM10.

(2) Additional Terms and Conditions

a. 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 PE	A drift eliminator achieving "drift loss" equal to or less than 0.005 percent;
	Mass emission rates of: 0.19 lb PM2.5/PM10 per hour and 0.22 lb PE per hour
	Visible PE shall not exceed 10% opacity, as a six-minute average.

*All emissions of particulate matter are considered to be PM2.5 or less.

b. 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 PM2.5/PM10. The requirements of this rule are equivalent to the requirements established pursuant to OAC rules 3745-31-10 through 3745-31-20; 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.

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.

c. 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 emissions from this air contaminant source since the controlled potential to emit (PTE) is less than 10 tons per year taking into consideration the BACT requirements established under OAC rules 3745-31-10 through 3745-31-20.

BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 are not applicable to the particulate emissions emitted from this emissions unit. BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

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

e. 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 maintain the total dissolved solids (TDS) content of the circulating cooling water at 2,650 mg/L or less.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall determine the TDS content, in mg/L, of the cooling tower water in accordance with the following:

a. Conductivity shall be used to determine the TDS content of the cooling tower water based on an established correlation (or index) between TDS and conductivity of the cooling water.

b. The permittee shall properly install, operate, and maintain equipment to continuously monitor and electronically record the conductivity of the cooling tower water. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

c. The permittee shall employ a computerized data management system to determine the conductivity based on a monthly average of the electronically recorded information.

d. If the continuous conductivity monitor malfunctions or is otherwise not operational for greater than a 24-hour period:

i. The permittee shall notify the Ohio EPA district office or local air agency of such malfunction as soon as practicable, but not later than twenty-four hours after the discovery of the event. Notification shall take the form of a telephone call, fax, or other electronic notification.

ii. The duration of the equipment malfunction shall be recorded.

iii. The permittee shall perform and record daily conductivity tests of samples from the cooling tower water until the malfunction is resolved. The results of the samples shall be applied to the monthly conductivity calculation.

iv. The Ohio EPA district office or local air agency shall be notified when the condition causing the malfunction was corrected and the equipment is again in operation. Notification shall take the form of a telephone call, fax, or other electronic notification and shall occur as expeditiously as practicable, but no later than two weeks after the correction has occurred.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the TDS content requirement.

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 appropriate District Office or local air agency).

f) Testing Requirements

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

a. Emission Limitations:

0.19 pound PM2.5/PM10 per hour and 0.83 ton PM2.5/PM10 per rolling, 12-month period

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (198,360 gallons/hr) and by the maximum TDS content (2,650 mg/L), a 0.85 PM2.5/PM10 fraction*, and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

If required, the permittee shall submit a testing proposal to demonstrate that the maximum drift loss does not exceed 0.005 percent.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

*Reference - “Calculating Realistic PM10 Emissions from Cooling Towers, Abstract No. 216, Session No. AM-1b, Greystone Environmental Consultants, Inc., 650 University Avenue, Suite 100, Sacramento, California 95825, June 2001.

b. Emission Limitations:

0.22 pound PE per hour and 0.96 ton PE per rolling, 12-month period

Applicable Compliance Method:

Compliance with the lb/hr limitation shall be demonstrated by multiplying the drift loss factor (0.005 percent) by the maximum circulating water flow rate (198,360 gallons/hr) and by the maximum TDS content (2,650 mg/L), and then applying the conversion factors of 3.785 L/gal and 454,000 mg/lb.

If required, the permittee shall submit a testing proposal to demonstrate that the maximum drift loss does not exceed 0.005 percent.

The annual limitation was determined by multiplying the hourly limitation by a maximum operating schedule of 8760 hours per year, and then dividing by 2000 pounds per ton. Therefore, provided compliance is shown with the hourly limitation, compliance with the annual limitation shall also be demonstrated.

c. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group - Meltshop Operations: P004, P005, P007, P012, P013, P014, P015, P903

EU ID	Operations, Property and/or Equipment Description
P004	Continuous casting operations (including torch cutting)
P005	Natural gas-fired ladle preheater (7.5 mmBtu/hr)
P007	Natural gas-fired tundish preheater (4 mmBtu/hr)
P012	Natural gas-fired ladle preheater (7.5 mmBtu/hr)
P013	Natural gas-fired ladle preheater (8 mmBtu/hr)
P014	Natural gas-fired ladle preheater (8 mmBtu/hr)
P015	Natural gas-fired tundish preheater (4 mmBtu/hr)
P903	Electric arc furnace operations (including charging, melting, tapping, slag skimming/handling, etc.)

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)m., b)(2)c.ii., and d)(6).

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	See b)(2)a. Combined meltshop emission limitations* for emissions units P004, P005, P007, P012, P013, P014, P015, and P903: Particulate matter 10 microns or less in size (PM10): 0.0052 gr/dscf and 115.63 tons per rolling, 12-month period Particulate matter 2.5 microns or less in size (PM2.5): 0.0049 gr/dscf and 108.96 tons per rolling, 12-month period Lead (Pb): 0.002 pound per ton of steel produced and 0.657 ton per rolling, 12-month period Sulfur dioxide (SO2): 0.05 pound per ton

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		of steel produced and 164.25 tons per rolling, 12-month period Carbon monoxide (CO): 2.3 pounds per ton of steel produced and 755.55 tons per rolling, 12-month period Nitrogen dioxides (NOx): 0.4 pound per ton of steel produced and 131.40 tons per rolling, 12-month period Volatile organic compounds (VOC): 0.13 pound per ton of steel produced and 42.71 tons per rolling, 12-month period Mercury (Hg): 0.00033 lb/ton of steel produced and 0.178 ton per rolling, 12-month period See b)(2)a.
b.	ORC 3704.03(T)	See b)(2)b.
c.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)c.i.
d.	OAC rule 3745-31-05(A)(3), as effective 12/01/06	See b)(2)c.ii.
e.	OAC rule 3745-17-11(B)	See b)(2)d.
f.	OAC rule 3745-17-07(A)	See b)(2)e.
g.	OAC rule 3745-17-08(A)	See b)(2)f.
h.	OAC rule 3745-17-07(B)	See b)(2)g.
i.	OAC rule 3745-18-06(E)	See b)(2)h.
j.	40 CFR Part 60, Subpart AAa 40 CFR 60.270a – 60.276a 40 CFR Part 60, Subpart A 40 CFR 60.1 - 19	See b)(2)i.
k.	MACT, Subpart YYYYY 40 CFR 63.10680 – 63.10690	See Section B.2.
l.	40 CFR 63.1 – 63.15	Table 1 to 40 CFR, Part 63, Subpart YYYYY – Applicability of General Provisions to Subpart YYYYY specifies the applicable General Provisions from 40 CFR 63.1 – 63.15.
m.	ORC 3704.03(F) OAC rule 3745-114-01	See d)(6).

*The combined limitations shall be based on meltshop emissions from the stack of the baghouse control system serving the meltshop operations.

(2) Additional Terms and Conditions

a. The permittee shall employ best available control technology (BACT) for meltshop operations (emissions units P004, P005, P007, P012, P013, P014, P015, and P903). BACT has been determined to be the following:

Pollutant	BACT Requirements
PM2.5 PM10 Pb	Building enclosure (meltshop) equipped with a canopy hood/baghouse system capable of achieving 100% capture of all emissions within the meltshop building*.
	Direct-shell evacuation control (DEC) vented to baghouse for EAF (emissions unit P903)
	Maximum outlet concentration(s) from the baghouse of: 0.0049 gr PM2.5/dscf; 0.0052 gr PM10/dscf.
	Visible PE from the baghouse stack serving the meltshop shall not exhibit 3 percent (3%) opacity or greater, as a six-minute average
	0 percent (0%) opacity for visible fugitive particulate emissions from the meltshop building.
	Scrap management plan to reduce Pb emissions and emission standard of 0.002 lb Pb per ton of steel produced
SO2	Emission standard of 0.5 lb per ton of steel produced.
	Use of natural gas for the continuous casting operations (emissions until P004) and ladle and tundish preheaters.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of SO2.
CO	Emission standard of 2.3 lb per ton of steel produced.
	DEC control – CO captured by the DEC is oxidized at the air gap between the DEC elbow and DEC duct.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
NOx	Emission standard of 0.4 lb per ton of steel produced.
	The BACT analysis determined that no add-on controls were cost-effective for the reduction of CO.
VOC	Scrap management plan to reduce VOC emissions and emission standard of 0.13 lb per ton of steel produced.
Hg	Scrap management plan to reduce Hg emissions and an emission standard of 0.00033 lb Hg per ton of steel produced.

The maximum outlet concentrations and emission standards presented in the table above apply to the combined emissions from all meltshop operations. Compliance with the combined limitations shall be based on meltshop emissions from the stack of the baghouse control system serving the meltshop operations.

b. The BAT requirements under ORC 3704.03(T) have been determined to be compliance with the gr/dscf emission limitations for PM10, PM2.5, & Pb and

compliance with the lb/ton emission limitations for SO2, NOx, & CO established pursuant to OAC rules 3745-31-10 through 3745-31-20.

c. Meltshop operations include the following emissions units which are air contaminant sources which are exempt from PTI requirements as indicated by OAC rule 3745-31-03(A)(1):

P005	Natural gas fired ladle preheater (7.5 mmBtu/hr)
P007	Natural gas fired tundish preheater (4 mmBtu/hr)
P012	Natural gas fired ladle preheater (7.5 mmBtu/hr)
P013	Natural gas fired ladle preheater (8 mmBtu/hr)
P014	Natural gas fired ladle preheater (8 mmBtu/hr)
P015	Natural gas fired tundish preheater (4 mmBtu/hr)

These emissions units have been included in this PTI action only because they are part of a major modification involving major New Source Review - Prevention of Significant Deterioration (PSD) permitting. Best Available Technology (BAT) requirements for these emissions units under OAC rule 3745-31-05(A)(3), as effective November 30, 2001, and BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 have been determined to be the following:

i. Taking the normally exempt permit status of the emissions units above into consideration, BAT requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, have been determined to be compliance with the combined requirements for the meltshop operations established pursuant to OAC rules 3745-31-10 through 3745-31-20; 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.

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 any NAAQS pollutant emitted at less than ten tons per year from an individual emissions unit. 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.

ii. OAC rule 3745-31-05(A)(3), as effective December 1, 2006, applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3), as effective December 1, 2006 do not apply to the emissions unit indicated above

since the uncontrolled potential to emit for each NAAQS pollutant is less than 10 tons per year.

d. The emission limitation specified by this rule is less stringent than the combined PM10 emission limitation established for meltshop operations pursuant to OAC rules 3745-31-10 through 3745-31-20. It should be noted that all emissions or particulate matter are PM10. PM10 emissions are inclusive of PM2.5.

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

f. This facility is not located within an “Appendix A” area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), the meltshop operations are exempt from the requirements of OAC rule 3745-17-08.

g. Meltshop operations are exempt from the visible PE limitations specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B) (11) (e).

h. For emissions unit P004 and P903, the SO2 emission limitations specified by this rule for each emissions unit is less stringent than the SO2 emissions that these emissions units contribute to the combined, melt shop limitation established pursuant to OAC rule 3745-31-10 through 3745-31-20.

i. The emission limitations, control measures, and requirements specified by this rule are equivalent to or less stringent that the emission limitations, control measures, and requirements established pursuant to OAC rules 3745-31-10 through 20.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in emissions units P005, P007, P012, P013, P014, and P015.

(2) The permittee shall not exceed 20 daily heats from the electric arc furnace, emissions unit P903, based on a monthly average.

(3) The permittee shall follow the procedures outlined in its "Scrap Management Program" in order to minimize the use of scrap that contains mercury, lead, oils, plastics, and organic materials that are charged in the EAF. The "Scrap Management Program" was reviewed and approved by NWDO and shall be viewed as part of the operational requirements for the EAF permit. Any change to the "Scrap Management Program" that would increase the amount of these compounds present in the scrap, or result in the emissions of an air contaminant not previously emitted, must be approved by NWDO.

(4) See 40 CFR Part 60, Subpart AAa (40 CFR 60.270a – 60.276a).

(5) MACT requirements for mercury, see 40 CFR Part 63, Subpart YYYYY (40 CFR 63.10680 – 63.10690).

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for the electric arc furnace (EAF), emissions unit P903:

a. the number of heats per day from the EAF;

b. the monthly total number of heats from the EAF, in combined heats/month [sum of d)(1)a. for each calendar month;

c. the number of days per calendar month that the EAF was operating, in days/month for each calendar month; and

d. the combined number of heats per day from the EAF, based on a monthly average [d)(1)b. divided by d)(1)c. for each calendar month.

(2) For each day during which the permittee burns a fuel other than natural gas in emissions units P005, P007, P012, P013, P014, and P015, the permittee shall maintain a record of the type and quantity of fuel burned in the emissions unit(s).

(3) See 40 CFR Part 60, Subpart AAa (40 CFR 60.270a – 60.276a).

(4) The requirements in 40 CFR 60.273a – Emission monitoring and 40 CFR 60.274a – Monitoring of operations from 40 CFR Part 60 Subpart AAa are appropriate and sufficient for demonstrating on-going compliance with the BACT requirements established in accordance with OAC rules 3745-31-10 through 3745-31-20.

(5) MACT requirements for mercury, see 40 CFR Part 63, Subpart YYYYY (40 CFR 63.10680 – 63.10690).

(6) 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) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA’s eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any exceedance of the 20 daily heats from the electric arc furnace, emissions unit P903, based on a monthly average.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify all reportable items as required in 40 CFR 60.276a. Submission of the reporting

requirements of 40 CFR 60.276a on a quarterly basis (as opposed to semi-annually) will be appropriate and sufficient for meeting reporting requirements associated with BACT.

(4) 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 appropriate District Office or local air agency).

(5) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in emissions units P005, P007, P012, P013, P014, and P015. Each report shall be submitted within 30 days after the deviation occurs.

(6) See 40 CFR Part 60, Subpart AAa (40 CFR 60.270a – 60.276a).

(7) MACT requirements for mercury, see 40 CFR Part 63, Subpart YYYYY (40 CFR 63.10680 – 63.10690).

f) Testing Requirements

(1) The permittee shall conduct, or have conducted, emission testing for the meltshop operations (emissions units P004, P005, P007, P012, P013, P014, P015 and P903 in accordance with the following requirements:

a. The emission testing shall be conducted within 180 days following start-up of operations (as modified) under the provisions of this permit. The testing time frame specified may be amended or waived for cause upon prior request of, and written approval of, the Ohio EPA Northwest District Office. Future testing requirements shall be conducted in accordance with applicable rules, policies, etc. (i.e.: Engineering Guide #16, OAC rule 3745-15-04, etc.).

b. The emission testing shall be conducted to demonstrate compliance with the allowable emission limitations for PM10, PM2.5, Pb, SO2, CO, NOx, and VOC.

c. Methods 1-4 and the following additional test methods from 40 CFR, Part 60, Appendix A shall be employed to demonstrate compliance with the allowable mass emission rates:

Pollutant	Test Method
NOx	Method 7
CO	Method 10
VOC	Methods 18, 25, or 25A, as appropriate
SO2	Method 6
Lead	Method 29
Mercury	Method 29

PM2.5/PM10 testing shall be performed using Method 201/201A and 202 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.

d. The test(s) shall be conducted while the emissions unit(s) is operating at or near maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Acceptable test conditions pertaining to maximum capacity are outlined in a testing guidance document titled “Explanation of Ohio EPA's "test at max" policy for requiring performance testing to be conducted while emission units operate at maximum capacity”. Testing guidance documents are available on Ohio EPA’s website.

For test(s) not conducted at maximum capacity as specified above, the permittee may demonstrate through recordkeeping of post-test operating rates that the operating level(s) obtained during the test(s) are representative of a maximum operating rate that the emissions unit(s) is expected not to exceed. The maximum operating rate will be considered acceptable towards demonstrating that the emissions unit(s) is able to continuously comply with applicable emission limitations.

A retest of the emissions unit(s) will be necessary if records of post-test operating rates indicate that the maximum operating rate established during the test(s) is no longer representative of the expected maximum operating capacity. Evaluations of post-test operating rates to determine if they are representative of a maximum operating rate shall be performed in accordance with the same procedures for evaluating maximum capacity as outlined above.

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

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

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

h. For the purpose of determining the process weight rate during stack testing, the following procedures shall be followed:

i. The maximum process weight rate for stack testing purposes is 20 heats per day from the EAF. Each heat shall be maximized for weight.

ii. The process weight rate shall be determined by calculating the number of heats processed at the EAF per hour for each test run, prorated over a 24-hour period.

(EAF heats/hour) times (24 hours/day)

iii. The total time duration and production output for any partial EAF heats included within each baghouse test run will be incorporated into the process weight rate calculation.

iv. The average of the meltshop totals from the three test runs will be calculated to determine the process weight rate from the stack test.

i. For the purpose of determining compliance with the pound/ton emission limits during stack testing, the following procedures shall be followed:

i. The meltshop production output during the stack test will be determined by calculating the tons of steel produced in the heat(s) during each test run period.

ii. The total time duration and production output for any partial heats included within the test run will be incorporated into the production calculation.

iii. Any time periods when testing was halted for abnormal delays will be subtracted from the EAF for the production calculation.

(2) See 40 CFR Part 60, Subpart AAa (40 CFR 60.270a – 60.276a).

(3) MACT requirements for mercury, see 40 CFR Part 63, Subpart YYYYY (40 CFR 63.10680 – 63.10690).

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

a. <u>Emission Limitations</u>

Combined emission limitations from emissions units P004, P005, P007, P012, P013, P014, P015, and P903:

(a) 2.3 pound CO/ton steel produced;

(b) 0.13 pound VOC/ton steel produced;

(c) 0.5 pound SO2/ton steel produced;

(d) 0.4 pound NOx per ton of steel produced

(e) 0.002 pound lead/ton steel produced; and

(f) 0.00033 pound mercury/ton steel produced

Applicable Compliance Method

The pound/ton emission limitations were supplied by the company and represent weighted averages of the emissions from all of the melt shop emissions units. The limits were established based on maximum hourly operating conditions and a combination of best engineering judgment, past stack tests results from the facility, stack test results from similar operations at other facilities, and AP-42 emission factors. 100% of the total emissions from the melt shop are captured and vented to the meltshop baghouse. The permittee shall demonstrate compliance with the emission limitations in accordance with the testing requirements specified in f)(1).

b. Emission Limitations

Combined emission limitations from emissions units P004, P005, P007, P012, P013, P014, P015, and P903:

i. 131.40 tons NOx per rolling, 12-month period;

ii. 164.25 tons SO2 per rolling, 12-month period;

iii. 755.55 tons CO per rolling, 12-month period;

iv. 42.71 tons VOC per rolling, 12-month period;

v. 0.657 ton lead per rolling, 12-month period; and

vi. 0.178 ton mercury per rolling, 12-month period

Applicable Compliance Method

The annual emission limitations were established by multiplying the pound/ton limitations by the following maximum operating conditions from the EAF: 33 heats/day, 54.5 tons/heat, 365 days/year, and then dividing by 2,000 pounds/ton. Therefore, provided compliance is demonstrated with the pound/ton limitations and the maximum daily number of heats, compliance with the annual emission limitations shall be demonstrated.

c. Emission Limitation

0.0052 gr PM10/dscf;

0.0049 gr PM2.5/dscf

Applicable Compliance Method

The emission limitations above were established as BACT for meltshop operations. The permittee shall demonstrate compliance with the emission limitations in accordance with the testing requirements specified in f)(1).

d. Emission Limitations:

151.29 tons PM10 per rolling, 12-month period;

108.96 tons PM2.5 per rolling, 12-month period

Applicable Compliance Method

The annual emission limitations were established by multiplying the 0.0052 grain PM10/dscf and 0.0049 gr PM2.5/dscf limitations by the maximum volumetric air flow rate from the melt shop baghouse (592,288 dscfm), and by using the following conversion factors in order to convert to tons per 12-month period: 1 pound/7,000 grains, 60 minutes/hour, 8,760 hours/year, and 1 ton/2,000 pounds. Therefore, provided compliance is demonstrated with the 0.0052 gr PM10/dscf and 0.0049 gr PM2.5/dscf limitations, compliance with the annual emission limitations shall be demonstrated.

e. Emission Limitation

Visible PE from the baghouse serving the melt shop shall not exhibit 3 percent (3%) opacity or greater, as a six-minute average.

Applicable Compliance Method

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9, as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”) and the monitoring and recordkeeping requirements in this permit [see d)(3) and d)(4)].

f. Emission Limitation

Visible fugitive PE shall not exceed 0% opacity from the meltshop building.

Applicable Compliance Method

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9, as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”) and the monitoring and recordkeeping requirements in this permit [d)(3) and d)(4)].

g) Miscellaneous Requirements

(1) None.