

DRAFT CAAPP PERMIT  
February 18, 2009

217/782-2113

"RENEWAL"  
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Nucor Steel Kankakee, Inc.  
Attn: John R. Ohm  
One Nucor Way  
Bourbonnais, Illinois 60914-4127

I.D. No.: 091801AAA  
Application No.: 96030147

Date Received: September 5, 2006  
Date Issued:  
Expiration Date:

Operation of: Steel Mill  
Source Location: One Nucor Way, Bourbonnais, Kankakee County, 60914-4127  
Responsible Official: John R. Ohm, VP Operations

This permit is hereby granted to the above-designated Permittee to OPERATE a Steel Mill Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Anatoly Belogorsky at 217/782-2113.

Edwin C. Bakowski, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

ECB:AB:jws

cc: Illinois EPA, FOS, Region 1  
CES  
Lotus Notes

<sup>1</sup> Except as provided in Conditions 1.5 and 8.7 of this permit.

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**1.0 SOURCE IDENTIFICATION**

1.1 Source

Nucor Steel Kankakee, Inc.  
One Nucor Way  
Bourbonnais, Illinois 60914-4127  
815/939-5525

I.D. No.: 091801AAA  
County: Kankakee  
Standard Industrial Classification: 3312, Electric Arc Furnace Steel  
Mill

1.2 Owner/Parent Company

Nucor Steel Kankakee, Inc.  
One Nucor Way  
Bourbonnais, Illinois 60914-4127

1.3 Operator

Nucor Steel Kankakee, Inc.  
One Nucor Way  
Bourbonnais, Illinois 60914-4127

Ray Smith  
815/939-5525

1.4 Source Description

The Nucor Steel Kankakee, Inc is located at One Nucor Way in Bourbonnais, Illinois. The source is a steel mill that manufactures steel rod and other products.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains "Title I conditions" that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

EAF Dust Silo  
Heating/Dryout of Ladle  
1E17 Lime Silo 1  
1E18 Lime Silo 2  
1E19 Lime Silo 3  
Cooling Tower #10  
Carbon Silo

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

2 Tundish Heaters  
Cooling Tower #2  
Cooling Tower #3  
Cooling Tower #4  
Cooling Tower #5  
Parts Cleaning  
Cutoff Torches  
Tundish Dryer  
Rolling Mill

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit operated without any control device(s) that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by

35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

**4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE**

Description	Date Constructed	Emission Control Equipment	Subsection of this Permit
Electric Arc Furnace/Stirring Station	1989	Baghouse #1	7.1
Continuous Casters	1986	Baghouse #2	
Reheat Furnace	2004	None	7.2
EAF Dust Handling	1989	None	7.3
Slag Processing	1987	None	7.4
Gasoline Storage Tanks	1988	None	7.5
Fugitive Emissions	---	None	7.6

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOM emissions.

5.1.2 This permit is issued based on the source being an area source of HAPs.

### 5.2 Area Designation

5.2.1 This source is located in an area that is designated as attainment for all criteria pollutants.

### 5.3 Source-Wide Applicable Provisions and Regulations

5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.

5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.3.3 Fugitive Particulate Matter Operating Program

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

#### 5.3.4 Ozone Depleting Substances

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

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

#### 5.3.5 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

#### 5.3.6 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance

certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

#### 5.3.7 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

#### 5.4 Source-Wide Non-Applicability of Regulations of Concern

Source-wide non-applicability of regulations of concern are not set for this source. However, there are terms for unit specific non-applicability of regulations of concern set forth in Section 7 of this permit.

#### 5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

#### 5.6 Source-Wide Production and Emission Limitations

##### 5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	172.63
Sulfur Dioxide (SO <sub>2</sub> )	276.26
Particulate Matter (PM)	117.47
Nitrogen Oxides (NO <sub>x</sub> )	201.16
HAP, not included in VOM or PM	---
Total	767.52

5.6.2 Emissions of Hazardous Air Pollutants

Pursuant to Section 39.5(7)(a) of the Act, the potential emissions of HAPs from the source are less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there are unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the

right to observe all aspects of such tests [35 IAC 201.282(a)].

- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

#### 5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source. However, there are provisions for unit specific monitoring set forth in Section 7 of this permit.

#### 5.9 Source-Wide Recordkeeping Requirements

##### 5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

##### 5.9.2 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

#### 5.10 Source-Wide Reporting Requirements

##### 5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source.

5.12 Source-Wide Compliance Procedures

5.12.1 General Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be based on the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

**6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS**

Not applicable to this source

## 7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

### 7.1 Electric Arc Furnace (EAF)

#### 7.1.1 Description

The EAF is initially placed in position and scrap steel is charged by positioning the charge bucket over the open furnace shell. The bottom clamshell halves of the charge bucket are opened allowing the contents to fall into the EAF. The top of the EAF is repositioned and the scrap is melted by the transference of electricity between the electrodes through the scrap. Two to three charge buckets will typically fill the EAF during one heat. When the charge has been melted, the charging process is repeated.

Injection carbon and lime are transferred directly to EAF via a pneumatic conveyor or via forklift in hopper boxes. Once the scrap is completely molten and "flat bath" conditions are achieved in EAF, refining commences. Once the optimal chemical balance is achieved and the bath temperature is raised above the melting point of steel to ensure that the EAF contents are liquid when the EAF is emptied, or "tapped" into the ladle and transferred to the continuous caster. After tapping the heat, the ladle of molten steel is transported by overhead crane to the continuous caster (E2) by way of a ladle stirring station where the contents of the ladle are mixed by the injection of gaseous nitrogen. When properly positioned above the caster, a drain hole in the bottom of the ladle is opened and the molten steel empties into a tundish. The tundish is a refractory lined elongated trough which has multiple drainholes for the four (billet) strands of the continuous caster. The continuous billets emerge from the caster in strands, which are four and a half to five and a half inches square and cut to length by automatic torches.

Air pollutant emissions are continuously controlled by canopy hoods. During melting and refining, emissions from EAF are captured by the direct evacuation control (DEC) system. Pollutants that escape the DEC are captured by the canopy hoods in the roof of the melt shop. All of these emissions capture systems are vented through two positive pressure baghouses EP1 and/or EP16.

Note: This narrative description is for informational purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Electric Arc Furnace (EAF)	Electric Arc Furnace/Stirring Station (E1)	1989	Baghouses EP1 and/or EP16
	4 Strand Continuous Caster (E2)	1986	Baghouses EP1 and/or EP16

7.1.3 Applicable Provisions and Regulations

- a. The "affected EAF and associated units" for the purpose of these unit-specific conditions, is the emission units identified in Conditions 7.1.1 and 7.1.2.
- b. The affected EAF and associated units are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

Note: Individual process weight rates and associated PM emissions from the EAF, stirring station and caster shall be calculated separately.

- c. The affected EAF and associated units are subject to the following of 35 IAC 214.301:
 

No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- d. i. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- ii. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than

those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

- e. The affected EAF is subject to the limits of 40 CFR 60.272a, Subpart AAa. No owner or operator shall cause to be discharged into the atmosphere any gases which:
  - i. Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);
  - ii. Exit from a control device and exhibit 3 percent opacity or greater;
  - iii. Exit from a shop and, due solely to the operations of any affected EAF(s), exhibit 6 percent opacity or greater; and
  - iv. Discharge into the atmosphere from the dust-handling system any gases that exhibit 10 percent opacity or greater.
- f. The affected EAF is subject to the following requirements and limitations of 40 CFR Part 63 Subpart YYYYY National Emission Standards For Hazardous Air Pollutants For Area Sources: Electric Arc Furnace Steelmaking Facilities:
  - i. Install, operate, and maintain a capture system that collects the emissions from each EAF (including charging, melting, and tapping operations) and conveys the collected emissions to a control device for the removal of particulate matter (PM) [40 CFR 63.10686(a)];
  - ii. Not discharge more than 0.0052 gr/dscf, exit from a control device [40 CFR 63.10686(b)(1)];
  - iii. Not exhibit more than 6% opacity, exit from a melt shop [40 CFR 63.10686(b)(2)]; and
  - iv. Scrap management plan as specified in 40 CFR 63.10685 (see also Condition 7.1.5(b)).

#### 7.1.4 Non-Applicability of Regulations of Concern

The affected EAF is not required to be equipped with a bag leak detection system, as required by 40 CFR 60.273a(c), because the affected EAF is controlled by the positive-pressure baghouse(s).

#### 7.1.5 Control Requirements and Work Practices

- a. Beat Available Control Technology (BACT)
  - i. PSD Permit 07120005:

- A. The supply of scrap for the affected furnace shall be managed with a scrap management program that is developed and maintained to minimize the level of organics and other contaminants in the scrap accepted for the furnace that contribute to sulfur dioxide (SO<sub>2</sub>) emissions from the furnace, as further addressed in Condition 7.1.5(c).
- B. The furnace shall be operated with a direct-shell evacuation control system to promote oxidation of carbon monoxide (CO) with enlarged fourth hole collection duct and an elbow with drop-out box to control emissions of CO.
- C. The affected furnace shall be operated and maintained in accordance with good air pollution control practices to minimize emissions. These practices shall include specific practices to minimize the emissions of SO<sub>2</sub> attributable to contaminants in the scrap supply, including use of low-sulfur charge carbon for the furnace that contains no more than 1.0 percent sulfur by weight.
- D. The affected furnace shall be operated and maintained to achieve CO and SO<sub>2</sub> emission rates that are no more than 2.0 and 0.50 pounds per ton of steel produced, respectively.

ii. PSD Permit 04100024:

PSD Permit 07120005 does not revise BACT requirements previously set for VOM emissions from the affected furnace pursuant to Permit 04100024, as follows:

- A. The affected furnace shall be operated and maintained in accordance with good air pollution control practices to minimize emissions. These practices shall include specific practices to minimize the emissions of VOM attributable to contaminants in the scrap supply. These practices shall also include operation of the furnace with a direct-shell evacuation control system to facilitate combustion of VOM.
- B. The affected furnace shall be operated and maintained to achieve VOM emission rate that are no more than 0.28 pounds per ton of steel produced.

iii. PSD Permit 93010095:

PSD Permit 07120005 does not revise BACT requirements previously set for NO<sub>x</sub> emissions from the affected furnace pursuant to Permit 93010095, as follows:

- A. Emissions of NO<sub>x</sub> from the affected furnace shall not exceed 0.26 pounds per ton of steel produced, respectively.
- B. Any fuel burners operated on the affected furnace shall be of the low-NO<sub>x</sub> design, such as oxygen/natural gas burners, designed and maintained to generate no more than 0.14 pound NO<sub>x</sub> per million Btu heat input from fuel.

b. Good Operating Practices (PSD Permit 07120005)

The Permittee shall operate, maintain, and repair the affected furnace and its control system in a manner that is consistent with the following:

- i. The affected furnace shall be operated and in accordance with written operating procedures that set forth good air control practice, as follows. These procedures shall be developed and maintained by the Permittee.
  - A. Operating Procedures for the Furnace: These procedures shall address normal furnace operation, including startup, shutdown, and maintenance practices.
  - B. Operating Procedures for Fuel Burner: These procedures shall include target levels established for the following operating parameters for the burner:
    - 1. Air-fuel mixture
  - C. Operating Procedures for Control System: These procedures shall address normal air pollution control equipment operation, including startup and shutdown, and maintenance practices. The procedures may incorporate the manufacturers' recommended instructions for operation and maintenance.
- ii. Inspections: Visual inspections of the affected furnace and its air pollution control and monitoring equipment shall be conducted on at least a weekly basis.
- iii. Repairs: Prompt repairs shall be made upon identification of need either as a consequence of

formal inspections or other observations in conformance with good air pollution control practice.

c. Requirements of 40 CFR Part 63 Subpart YYYYY "National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities" [40 CFR 63.10685]:

i. For purposes of controlling contaminants from a scrap, the Permittee shall comply with the following requirements in either 40 CFR 63.10685(a)(1) or (a)(2):

A. *Chlorinated plastics, lead, and free organic liquids.* For metallic scrap utilized in the EAF, the Permittee shall comply with the listed below requirements. Certain scrap at the source may be subject to 40 CFR 63.10685(a)(1) and other scrap subject to 40 CFR 63.10685(a)(2) provided the scrap remains segregated until charge make-up.

*Pollution prevention plan.* For the production of steel other than leaded steel, the Permittee shall prepare and implement a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquids that is charged to the furnace. For the production of leaded steel, the Permittee shall prepare and implement a pollution prevention plan for scrap selection and inspection to minimize the amount of chlorinated plastics and free organic liquids in the scrap that is charged to the furnace. The Permittee shall submit the scrap pollution prevention plan to the permitting authority for approval. The Permittee shall operate according to the plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. The Permittee shall request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The Permittee shall keep a copy of the plan onsite, and shall provide training on the plan's requirements to all plant personnel with materials acquisition or inspection duties. Each plan shall include the following information:

- Specifications that scrap materials must be depleted (to the extent practicable) of undrained used oil filters, chlorinated plastics, and free organic liquids at the time of charging to the furnace.
- A requirement in the scrap specifications for removal (to the extent practicable) of lead-containing components (such as batteries, battery cables, and wheel weights) from the scrap, except for scrap used to produce leaded steel.
- Procedures for determining if the requirements and specifications in 40 CFR 63.10685(a)(1) are met (such as visual inspection or periodic audits of scrap providers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.
- The requirements of 40 CFR 63.10685(a)(1) do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace. These exempted materials must be identified in the pollution prevention plan.

B. *Restricted metallic scrap.* For the production of steel other than leaded steel, the Permittee shall not charge to a furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, lead-containing components, chlorinated plastics, or free organic liquids. For the production of leaded steel, the Permittee shall not charge to the furnace metallic scrap that contains scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers or capacitors containing polychlorinated biphenyls, chlorinated plastics, or free organic liquids. This restriction does not apply to any post-

consumer engine blocks, post-consumer oil filters, or oily turnings that are processed or cleaned to the extent practicable such that the materials do not include lead components, chlorinated plastics, or free organic liquids. This restriction does not apply to motor vehicle scrap that is charged to recover the chromium or nickel content if the Permittee meets the requirements in 40 CFR 63.10685(b)(3).

- ii. *Mercury requirements.* For scrap containing motor vehicle scrap, the Permittee shall procure the scrap pursuant to one of the compliance options in 40 CFR 63.10685(b)(1), (2), or (3) for each scrap provider, contract, or shipment. For scrap that does not contain motor vehicle scrap, the Permittee shall procure the scrap pursuant to the requirements in 40 CFR 63.10685(b)(4) for each scrap provider, contract, or shipment. The Permittee may have one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision.

*Site-specific plan for mercury switches.* The Permittee shall comply with the following requirements in 40 CFR 63.10685 (b)(1)(i) through (v):

1. The Permittee shall include a requirement in the scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap.
2. The Permittee shall prepare and operate according to a plan demonstrating how the facility will implement the scrap specification in paragraph 40 CFR 63.10685 (b)(1)(i) for removal of mercury switches. The Permittee shall submit the plan to the permitting authority for approval. The Permittee shall operate according to this plan as submitted during the review and approval process, operate according to the approved plan at all times after approval, and address any deficiency identified by the permitting authority within 60 days following disapproval of a plan. The Permittee may request approval to revise the plan and may operate according to the revised plan unless and until the revision is disapproved by the permitting authority. The permitting authority may change the approval status of the plan upon 90-days

written notice based upon the semiannual compliance report or other information. The plan must include:

- A means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268). The plan must include documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the Permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols;
- Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;
- Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and
- Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher

percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in 40 CFR 63.10685 (b)(1)(ii)(C).

3. The Permittee shall require each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to your facility during the previous year and the basis for the estimate. The permitting authority may request documentation or additional information at any time.
4. The Permittee shall establish a goal for each scrap provider to remove at least 80 percent of the mercury switches. Although a site-specific plan approved under 40 CFR 63.10685(b)(1) may require only the removal of convenience light switch mechanisms, the permitting authority will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal.
5. For each scrap provider, the Permittee shall submit semiannual progress reports to the permitting authority that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches removed, and certification that the removed mercury switches were recycled at RCRA-permitted facilities or otherwise properly managed pursuant to RCRA Subtitle C regulations referenced in 40 CFR 63.10685 (b)(1)(ii)(A). This information can be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment. The permitting authority may change the approval status of a site-specific plan following 90-days notice based on the progress reports or other information.

- B. *Option for approved mercury programs.* The Permittee shall certify in the notification of compliance status that the source participates

in and purchase motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator based on the criteria in 40 CFR 63.10685(b)(2)(i) through (iii). If the Permittee purchases motor vehicle scrap from a broker, the Permittee shall certify that all scrap received from that broker was obtained from other scrap providers who participate in a program for the removal of mercury switches that has been approved by the Administrator based on the criteria in 40 CFR 63.10685(b)(2)(i) through (iii). The National Vehicle Mercury Switch Recovery Program and the Vehicle Switch Recovery Program mandated by Maine State law are EPA-approved programs under 40 CFR 63.10685(b)(2) unless and until the Administrator disapproves the program (in part or in whole) under 40 CFR 63.10685 (b)(2)(iii) of this section.

1. The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;
2. The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes. Although a program approved under paragraph (b)(2) of this section may require only the removal of convenience light switch mechanisms, the Administrator will credit all documented and verifiable mercury-containing components removed from motor vehicle scrap (such as sensors in anti-locking brake systems, security systems, active ride control, and other applications) when evaluating progress towards the 80 percent goal; and
3. The program sponsor agrees to submit progress reports to the Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing

subtitle C of RCRA (40 CFR parts 261 through 265 and 268). The progress reports must be based on a database that includes data for each program participant; however, data may be aggregated at the State level for progress reports that will be publicly available. The Administrator may change the approval status of a program or portion of a program (e.g., at the State level) following 90-days notice based on the progress reports or on other information.

4. The Permittee shall develop and maintain onsite a plan demonstrating the manner through which your facility is participating in the EPA-approved program.
  - The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.
  - The Permittee shall provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles. Upon the request of the permitting authority, the Permittee shall provide examples of materials that are used for outreach to suppliers, such as letters, contract language, policies for purchasing agents, and scrap inspection protocols.
  - The Permittee shall conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

*Option for specialty metal scrap.* The Permittee shall certify in notification of compliance status that the only materials from motor vehicles in the scrap are materials recovered for their specialty

alloy (including, but not limited to, chromium, nickel, molybdenum, or other alloys) content (such as certain exhaust systems) and, based on the nature of the scrap and purchase specifications, that the type of scrap is not reasonably expected to contain mercury switches.

*Scrap that does not contain motor vehicle scrap.* For scrap not subject to the requirements in 40 CFR 63.10685(b)(1) through (3), the Permittee shall certify in notification of compliance status and maintain records of documentation that this scrap does not contain motor vehicle scrap.

7.1.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected EAF and associated units are subject to the following production and emission limits:

- a. The production of steel the affected EAF shall not exceed 140 tons per hour and 1,100,000 tons per year.
- b. Emissions from the affected EAF shall not exceed the following limits:

Pollutant	Limit		
	Lbs/Hour	Lbs/Ton	Tons/Year
VOM	39.2	0.28	154.8
SO <sub>2</sub>	70.0	0.50	275.8
PM	22.78	0.163	89.5
CO	280.0	2.0	1100.0
NO <sub>x</sub>	37.1	0.26	145.8

These emission limits are based on the maximum allowable production limits identified in Condition 7.1.6(a).

- c. The above limitations were established in PSD Permit 07120005, pursuant to PSD. These limits ensure that the modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].
- d. For production limits of Condition 7.1.6(a), compliance with the hourly limit shall be determined as a weekly average. Compliance with the annual limitation shall be determined from a running total of 12 months of data [T1].
- e. Compliance with emission limits of Condition 7.1.6(b) shall be determined from: 1) operating information for the affected furnace at its control systems and 2) appropriate

emission factors, that reflect the actual operating conditions of the furnace and its control systems, and are derived in order of preference from source-specific testing, source-specific evaluation, published USEPA factors, and other published factors. Hourly limits are based on a weekly average [T1].

- f. For emission limits of Condition 7.1.6(b), compliance with the annual limitations shall be determined from a running total of 12 months of data [T1].

#### 7.1.7 Testing Requirements

- a. Requirements of PSD Permit 07120005:  
The Permittee shall conduct the following tests of the affected EAF within 365 days of commencement of operation of the modified EAF and any time thereafter upon request by the Illinois EPA:
  - i. The Permittee shall have emission test(s) conducted for PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOM, and lead emissions from the affected EAF.
  - ii. During the measurements of PM and PM<sub>10</sub> emissions, observations of opacity shall also be conducted in accordance with USEPA Method 9.
  - iii. The following methods and procedures shall be used for testing of PM emissions:
    - A. Method 5 or Method 5D, as appropriate for the type of baghouse.
    - B. The sampling time and sample volume for each run shall be at least 4 hours and 4.5 dscm (160 dscf) and, when a single furnace is sampled, the sampling time shall include an integral number of heats.
  - iv. The following methods and procedures shall be used for testing emissions unless other methods are approved by the Illinois EPA as part of the approval of the test plan. Refer to 40 CFR 60, Appendix A and 40 CFR 51, Appendix M for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Sulfur Dioxide	USEPA Method 6
Nitrogen Oxides	USEPA Method 7
Carbon Monoxide	USEPA Method 10
PM	USEPA Method 5
PM <sub>10</sub>	USEPA Methods 5 and 202

Volatile Organic Material USEPA Method 18 and 25  
or 25A, as appropriate  
Lead USEPA Method 12 or 29\*

\* If Method 29 is used, measurements for metal other than lead shall be conducted.

- v. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review and approval. This plan shall describe the specific procedures for testing including as a minimum:
- A. The person(s) who will be performing sampling and analysis and their experience with similar tests.
  - B. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, the levels of operating parameters at or within which compliance is intended to be shown, if parameters for the process and any control equipment will be determined.
  - C. The specific determination of emissions and operations intended to be made, including sampling and monitoring locations.
  - D. The test methods that will be used, with the specific analysis method.
  - E. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
  - F. A statement that the testing will be performed by a qualified independent testing service.
- vi. A. Prior to carrying out these tests, the Illinois EPA shall be notified a minimum of 30 days prior to the scheduled date of these tests with the exact date, time and place of these tests, to enable the Illinois EPA to witness these tests.
- B. If the scheduled date for the test is changed, the Permittee shall inform the Illinois EPA within five (5) working days of the scheduled test date and must specify the date and time of the rescheduled test.

vii. A copy of the Final Reports for these tests and compliance status shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized. These reports shall include detailed information on the operation of the furnace and associated control system during the period of testing, including the type of steel being made and intended product.

b. Opacity Observations

The Permittee shall conduct daily observations of visible emissions by a certified visible emission observer, in accordance with the NSPS, 40 CFR 60.273a, 60.274a and 60.276a. At a minimum, there shall be at least one person on the plant staff at an appropriate level of authority, whose duties include participating in sessions for certification in observation of visible emissions.

Prior to the next scheduled renewal of this CAAPP permit, the Permittee shall conduct the tests described in Conditions 7.1.7(a) and (b) and submit such testing results to the Illinois EPA no later than within 90 days after expiration date of the current permit.

d. During emission tests for air pollutants identified in Condition 7.1.7(a), emission factors (lb/ton of steel produced) shall be established. These emission factors shall be used further reports and emission calculations for the affected EAF.

7.1.8 Monitoring Requirements

a. Inspection Requirements and Operational Monitoring, as required by PSD Permit 07120005:

i. For the affected EAF, the Permittee shall perform detailed operational inspections on at least a monthly basis of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

ii. The Permittee shall perform all applicable operational monitoring required by 40 CFR 60 Subpart AAa, including:

A. Recording the furnace static pressure and control system fan motor amperes and damper

position, in accordance with 40 CFR 60.274(a) or monitoring for volumetric flow through each separately ducted hood or monitoring for volumetric flow rate at the control device inlet and recordkeeping for damper position in accordance with 40 CFR 60.274a(b).

B. Monitoring for the pressure in the free space inside the arc furnace or conducting daily observations for shop opacity in accordance 40 CFR 60.274(f).

iii. The Permittee shall install, operate and maintain instrumentation for the following parameters in the capture system and baghouses for the affected furnace.

A. Fan motor amperes

b. Monitoring requirements established in 40 CFR 63.10686(e): The Permittee shall monitor the capture system and PM control device required by Subpart YYYYY, maintain records, and submit reports according to the compliance assurance monitoring requirements in 40 CFR Part 64. The exemption in 40 CFR 64.2(b)(1)(i) for emissions limitations or standards proposed after November 15, 1990 under section 111 or 112 of the CAA does not apply.

c. Compliance Assurance Monitoring (CAM) Requirements

The affected EAF and associated units are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, Table 1 pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)]. (Note: the new or revised CAM plan is required only at the time of CAAPP renewal or significant modification of the current CAAPP permit in regards to the operations of EAF).

i. Continued Operation [40 CFR 64.7(c)]

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

repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- ii. Response to Excursions or Exceedances [40 CFR 64.7(d)]
  - A. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - B. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device,

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected EAF and associated units to demonstrate compliance with

conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Records required by PSD Permit 07120005:

- i. The Permittee shall keep a file containing the specifications for the maximum sulfur content of each charge carbon product used in the affected EAF (percent by weight), with supporting documentation.
- ii. The Permittee shall keep the following operating records for the affected EAF:
  - A. Steel (metal) production (tons/day, tons/month, and tons/year).
  - B. Fuel consumption, as determined directly from fuel meters or indirectly from operating hours of the burners and their rated capacity.
- iii.
  - A. The Permittee shall keep an operating log or other records for the affected EAF which includes information on unit status and operating schedule.
  - B. The Permittee shall maintain an operating and maintenance log for the fabric filter system for the affected furnace, including the following as applicable:
    1. Documentation for daily observations by Method 9 of the opacity of the baghouse exhaust and of the opacity of the melt shop, when conducted as an alternative to monitoring of EAF shell pressure once per shift in accordance with 40 CFR 60.273a(d);
    2. Data for pressure drop across the system, on an hourly basis;
    3. Data for damper positions for the evacuation system (percent open/closed) and the amperage of the baghouse fans, once per shift; and
    4. Information for incidents of malfunction, with date, description impact on emissions, duration of event, probable cause, and corrective actions.
- iv. The Permittee shall keep inspection, maintenance and repair log(s) or other records for the affected EAF and associated hooding, ductwork and baghouse that

includes the inspection and preventative maintenance schedules and a description of inspection, maintenance activities that are performed, with date and responsible party.

- v. The Permittee shall maintain records of the following items related to emissions of the affected EAF:
    - A. The standard emission factors (lbs/ton) used by the Permittee for estimating controlled emissions from the furnace, which information shall be based on site-specific test data, representative test data or emission determination methodology published by USEPA, with supporting explanation and calculations.
    - B. Emissions of PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOM, CO, and lead (tons/month and tons/year), with supporting calculations.
  - vi. The Permittee shall keep records for all opacity measurements for the affected EAF made in accordance with USEPA Method 9 that the Permittee conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements, if one was prepared, or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the furnace operations, the observed opacity, and copies of the raw data sheets for the measurements.
- b. Records required by Subpart YYYYY:
- Pursuant to 40 CFR 63.10685(c) and in addition to the records required by 40 CFR 63.10, the Permittee shall keep records to demonstrate compliance with the requirements for a pollution prevention plan in 40 CFR 63.10685(a)(1) and/or for the use of only restricted scrap in 40 CFR 63.10685(a)(2) and for mercury in 40 CFR 63.10685(b)(1) through (3) as applicable. The Permittee shall keep records documenting compliance with 40 CFR 63.10685(b)(4) for scrap that does not contain motor vehicle scrap.
- c. For purposes of CAM, the Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected EAF and associated units with the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected EAF and associated units with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.
- b. Pursuant to 40 CFR 60.276a(f), for the purpose of demonstration compliance with 40 CFR 60.272a(a), the Permittee shall submit to the Illinois EPA a written report of the results of the test by including the applicable information presented in 40 CFR 60.276a(f).
- c. Pursuant to 40 CFR 60.276a(b), the Permittee shall submit a written semi-annual report of exceedances of the control device opacity. For the purposes of these reports, exceedances are defined as all 6-minute periods during which the average opacity is 3 percent or greater.
- d. Pursuant to 40 CFR 60.276a(g), the Permittee shall submit a written semi-annual report of exceedances of the shop opacity limit specified in 40 CFR 60.272a(a)(3).
- e. Reporting requirements established in 40 CFR 63.10685(c)(3):

The Permittee shall submit semiannual compliance reports to the Illinois EPA for the control of contaminants from scrap according to the requirements in 40 CFR 63.10(e). The report must clearly identify any deviation from the requirements in 40 CFR 63.10685(a) and (b) and the corrective action taken. The Permittee shall identify which compliance option in 40 CFR 63.10685(b) applies to each scrap provider, contract, or shipment.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected EAF and associated units.

#### 7.1.12 Compliance Procedures

- a. Compliance with requirements of Condition 7.1.3 and Condition 7.1.6 shall be based on the appropriate control

requirements/work practices, testing, monitoring, recordkeeping and reporting requirements as established in Conditions 7.1.5, 7.1.7, 7.1.8, 7.1.9 and 7.1.10, respectively.

- b. Compliance with the emission limits of Condition 7.1.6 shall be based on the recordkeeping requirements of Condition 7.1.9 and calculated based on the following site-specific emission factors derived from the tests and/or established by this permit:

Pollutant	Emission Factor* (lb/ton Steel)
PM	0.10
NO <sub>x</sub>	0.25
SO <sub>2</sub>	0.35
VOM	0.15
CO	0.86

\* The above emission factors could be revised or modified based on the most currently available site-specific data derived from the newly conducted tests.

- c. The conditions described above are established in accordance with provisions 39.5(7) of the Act.

7.2 Reheat Furnace

7.2.1 Description

When the stored billets are selected for further processing through the rolling mill, they are moved by overhead crane to the reheat furnace. Billets are individually pushed through the natural gas-fired furnace to attain sufficiently high temperature to be rolled into rebar or other merchant products. The residence time in the reheat furnace is about 1 hour and a final temperature of approximately 2300<sup>0</sup> F. Upon leaving the reheat furnace, individual billets proceed to the hot rolling mill where the cross-section of the billet is progressively reduced and shaped into the desired product.

Note: This narrative description is for informational purposes only and is not enforceable.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Reheat Furnace	Natural-gas fired low-NO <sub>x</sub> burners (160 mmBtu/hr)	2004	None

7.2.3 Applicable Provisions and Regulations

- a. An "affected reheat furnace for the purpose of these unit-specific conditions, is a furnace as described in conditions 7.2.1 and 7.2.2.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
- c. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2,000 ppm [35 IAC 214.301].
- d. The affected reheat furnace is subject to 35 IAC 212.321(a), as defined in 35 IAC 266.105 and 266.115, which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the

allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected reheat furnace is not subject to CO emission limits described in 35 IAC 216.121, because the affected reheat furnace is not a fuel combustion emission source.
- b. The affected reheat furnace is not subject to CO emission limits described in 35 IAC Part 217, because the affected reheat furnace is not a fuel combustion emission source or relevant industrial process described in 35 IAC 217.301.
- c. This permit is issued based on the affected reheat furnace not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected reheat furnace does not use an add-on control device.

7.2.5 Control Requirements and Work Practices

Natural gas shall be the only fuel fired in the affected reheat furnace. This condition is established in accordance with the construction permit 04060017.

7.2.6 Production and Emission Limitations

- a. Annual natural gas usage shall not exceed 1401.6 million SCF.
- b. Emissions from the affected reheat furnace shall not exceed the following limits:

Pollutant	(Tons/Month)	(Tons/Year)
PM	0.53	5.33
CO	5.89	58.9
NO <sub>x</sub>	4.9	49.1
VOM	0.39	3.85
SO <sub>2</sub>	0.05	0.42

- c. The above limitations were established in Permit 04060017, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].
- d. Compliance with the annual limitations shall be determined from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.2.7 Testing Requirements

Upon the reasonable request from the Illinois EPA, the Permittee shall conduct emission test(s) for NO<sub>x</sub> as follows:

The following methods and procedures shall be used for testing of NO<sub>x</sub> emissions, refer to 40 CFR 60, Appendix A for USEPA test methods:

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Nitrogen Oxides	USEPA Method 7

7.2.8 Monitoring Requirements

In order to verify compliance with 35 IAC 212.123(a) (Condition 7.2.3), the Permittee shall conduct an opacity observations annually.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected reheat furnace to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, VOM, and CO (tons/month and tons/year). These emissions shall be calculated based on fuel consumption and the applicable emission factors described in Condition 7.2.12.
- b. Natural gas usage (mmscf/month and mmscf/year).
- c. Results of any required stack tests and monitoring, if conducted.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected reheat furnace from the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected reheat furnace with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(iii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected reheat furnace.

7.2.12 Compliance Procedures

- a. Compliance with various statutes of Condition 7.2.3 is achieved by the testing, monitoring and recordkeeping requirements established in this subsection and the consumption of the natural gas as the only fuel used in the affected reheat furnace.
- b. Compliance with the emission limits in Condition 7.2.6 shall be determined based on the recordkeeping requirements of Condition 7.2.9 and calculated based on the emission factors presented in Condition 7.2.12(c) below.
- c. Emission factors:

Pollutant	Emission Factor (Lb/mmscf)
PM	7.6
NO <sub>x</sub>	50.0
SO <sub>2</sub>	0.6
VOM	5.5
CO	84.0

These are the emission factors (adjusted for the affected reheat furnace) for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, March, 1998.

$$\text{Furnace Emissions (ton)} = [(\text{Natural Gas Consumed, mmscf}) \times (\text{The Appropriate Emission Factor, lb/mmscf})] / (2,000 \text{ lb/ton})$$

- d. The conditions described above are established in accordance with provisions 39.5(7) of the Act.

7.3 EAF Dust Handling

7.3.1 Description

Electric arc furnace dust is transferred by screw conveyors and pneumatic transporters to a storage silo for filling to railroad cars in an enclosed building.

Note: This narrative description is for informational purposes only and is not enforceable.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
EAF Dust Handling	Transfer of collected EAF dust	1989	Bin vent; Baghouse #2

7.3.3 Applicable Provisions and Regulations

- a. The "affected dust handling system" for the purpose of these unit-specific conditions, is the system/operation as described in Conditions 7.3.1 and 7.3.2.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
- c. The affected dust handling system is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- d. No owner or operator subject to the provisions of 40 CFR Part 60 Subpart AAa shall cause to be discharged into the atmosphere from the dust-handling system any gases that exhibit 10 percent opacity or greater [40 CFR 60.272a(b)].

7.3.4 Non-Applicability of Regulations of Concern

The affected dust handling system is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary

Sources, because the affected dust handling system does not have potential pre-control device emissions of PM that equals or exceeds major source threshold levels.

7.3.5 Control Requirements and Work Practices

Control requirements and work practices are not set for the affected dust handling system.

7.3.6 Production and Emission Limitations

In addition to Condition 7.3.3(b) and the source-wide emission limitations in Condition 5.6.1, the affected dust handling system is subject to the following:

Emissions from the affected dust handling system shall not exceed the following limits:

Pollutant	(Ton/yr)
PM	3.0

The above limitations were established in Permit 04060012, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.3.7 Testing Requirements

- a. For verification of 10 percent opacity limit established by 40 CFR 60.272a(b) for the affected dust handling system, the Permittee shall conduct quarterly observations of visible emissions by a certified visible emission observer, in accordance with Method 9 and the procedures of 40 CFR 60.11. At a minimum, there shall be at least one person on the plant staff at an appropriate level of authority, whose duties include participating in sessions for certification in observation of visible emissions.
- b. The results of opacity observations are required to be submitted to the Illinois EPA in accordance with Condition 8.5 only when such observations establish exceedance of the standard identified in Condition 7.3.3(d).

7.3.8 Monitoring Requirements

The monitoring requirements are not set for the affected dust handling system.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected dust handling system to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly and annual records of dust shipped (tons).
- b. Monthly and annual records of emissions (tons/mo and tons/yr) calculated in accordance with the compliance procedure described in Condition 7.3.12.
- c. Records of opacity observations.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected dust handling system from the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected dust handling system with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(iii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected dust handling system.

7.3.12 Compliance Procedures

- a. Compliance with various statutes of Condition 7.3.3 is achieved by the testing and recordkeeping requirements established in this subsection for the affected dust handling units.
- b. Compliance with the emission limits in Conditions 5.6.1 and 7.3.6 shall be calculated based on the following emission equation:

Pollutant	Emission Factor (lb/ton)
PM	0.21

PM/Lead Emissions = [(appropriate emission factor  
(lb/ton)) \* (dust shipped (ton))]/2000 lb/ton

Emission factors are from AP-42 for concrete batching  
operations, Table 11.12-2.

7.4 Slag Processing

7.4.1 Description

Slag from the arc furnace is removed from the melt shop, taken to the processing site, sized and transported.

Note: This narrative description is for informational purposes only and is not enforceable.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Slag Processing	Handling and reprocessing	1987	None

7.4.3 Applicable Provisions and Regulations

- a. The "affected slag processing system" for the purpose of these unit-specific conditions, is the system/operation as described in Conditions 7.4.1 and 7.4.2.
- b. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- c. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.
- d. The affected slag processing system is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

7.4.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected slag processing system not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected slag processing system does not use an add-on control device.

7.4.5 Control Requirements and Work Practices

The control requirements and work practices are not set for the affected slag processing system.

7.4.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6.1, the affected slag processing system is subject to the following:

Emissions from the affected slag processing system shall not exceed the following limits:

Pollutant	(Ton/yr)
PM	7.0

The above limitations were established in the initial CAAPP Permit 96030147, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.4.7 Testing Requirements

For the affected slag processing system, the Permittee shall conduct quarterly observations of visible emissions by a certified visible emission observer. At a minimum, there shall be at least one person on the plant staff at an appropriate level of authority, whose duties include participating in sessions for certification in observation of visible emissions.

7.4.8 Monitoring Requirements

The monitoring requirements are not set for the affected slag processing system.

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected slag processing system to demonstrate compliance with

conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly and annual records of slag processed (tons).
- b. Monthly and annual records of emissions (tons/mo and tons/yr) calculated in accordance with the compliance procedure described in Condition 7.4.12.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected slag processing system from the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected slag processing system with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected slag processing system.

7.4.12 Compliance Procedures

- a. Compliance with various statutes of Condition 7.4.3 is achieved by the testing and recordkeeping requirements established in this subsection for the affected slag processing system.
- b. Compliance with the emission limits in Conditions 5.6.1 and 7.4.6 shall be calculated based on the following emission equation:

Pollutant	Emission Factor (lb/ton)
PM	0.1

$$\text{PM/Lead Emissions} = [(\text{appropriate emission factor (lb/ton)}) * (\text{dust shipped (ton)})] / 2000 \text{ lb/ton}$$

- c. The condition described above is established in accordance with provisions 39.5(7) of the Act.

7.5 Gasoline Storage Tanks

7.5.1 Description

Gasoline storage tanks are used for on-site dispensing operations.

Note: This narrative description is for informational purposes only and is not enforceable.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Gasoline Storage Tanks	Gasoline Storage Tank A2 (E9)	1988	None
	Gasoline Storage Tank 12 (E20)	1988	None
	Gasoline Storage Tank L2 (E21)	1988	None

7.5.3 Applicable Provisions and Regulations

- a. The "affected tank" for the purpose of these unit-specific conditions, is the gasoline storage tank as described in Conditions 7.5.1 and 7.5.2.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201, or unless such tank is a pressure tank as described in Section 215.121(a) or is fitted with a recovery system as described in Section 215.121(b)(2) [35 IAC 215.122 (b)].
- c. By January 10, 2011, the affected tanks and associated gasoline dispensing operations shall be subject to requirements of 40 CFR Part 63 Subpart CCCCCC as discussed further in Condition 7.5.5.

7.5.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected gasoline storage tanks do not use an add-on control device.

7.5.5 Control Requirements and Work Practices

The following requirements of 40 CFR 63.1116(a) applicable to the affected storage tanks (with a total throughput less than 10,000 gallons/month):

The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- a. Minimize gasoline spills;
- b. Clean up spills as expeditiously as practicable;
- c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
- d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

#### 7.5.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6.1, the affected tanks are subject to the following:

Emissions from the affected tanks shall not exceed the following limits:

Tank	Pollutant	(Ton/yr)
A2	VOM	0.25
L2	VOM	0.07
L2	VOM	0.06

The above limitations were established in the initial CAAPP Permit 96030147, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

#### 7.5.7 Testing Requirements

The testing requirements are not set for the affected tanks.

#### 7.5.8 Monitoring Requirements

Inspections of the affected tanks and the proper conditions/operations of the associated submerged loading pipes shall be conducted annually.

#### 7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected tanks to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly and annual records of gasoline throughput to each individual tank (gal/mo and gal/yr).
- b. Records of annual inspections.
- c. Monthly and annual records of emissions for the individual tanks (tons/mo and tons/yr) calculated in accordance with the compliance procedure described in Condition 7.5.12.

#### 7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected tanks from the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected tanks with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

#### 7.5.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected tanks.

#### 7.5.12 Compliance Procedures

- a. Compliance with Conditions 7.5.3(b) and (c) is achieved by the testing and recordkeeping requirements established in this subsection for the affected tanks.
- b. Compliance with the emission limits in Conditions 5.6.1 and 7.5.6 shall be calculated based on the TANK program.

7.6 Fugitive Emissions

7.6.1 Description

The source has various processes that generate fugitive dust emissions (e.g. storage pile, roads, etc.).

Note: This narrative description is for informational purposes only and is not enforceable.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Fugitive Emissions	- Paved Roads - Unpaved Roads - Aggregate Handling and Storage Piles - Industrial Wind Erosion	N/A	None

7.6.3 Applicable Provisions and Regulations

- a. The "affected source of fugitive emissions" for the purpose of these unit-specific conditions, is the activities as described in Conditions 7.6.1 and 7.6.2.
- b. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source [35 IAC 212.301].

7.6.4 Non-Applicability of Regulations of Concern

This permit is issued based on the affected source of fugitive emissions not being subject to 35 IAC 212.304 through 212.312, because the source is located outside of the area identified by 35 IAC 212.302.

7.6.5 Control Requirements and Work Practices

- a. Emissions of particulate matter (PM) from vehicle traffic on roadways shall be controlled by paving the unpaved road as indicated in the application.
- b. Emissions of fugitive particulate matter from scrap delivery, production supplies, finished products and slag handling on the supply road shall be controlled by:

- i. Paving the road, and
  - ii. Vacuum sweeping of the road at least once a day, unless any measurable precipitation recorded by State Water Survey Office in Bourbonnais, has occurred during the previous 24 hours or there is snow or ice build up on the road.
- c. The requirements from above are originated from the original CAAPP permit 96030147.

#### 7.6.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6.1, the affected source of fugitive emissions is subject to the following:

Emissions from the affected source of fugitive emissions shall not exceed the following limits:

Total fugitive particulate matter emissions from the source shall not exceed 10.54 tons/year from slag storage piles (wind erosion), truck unloading on storage piles, the haul road, scrap handling and production supplies.

The above limitations contain revisions to previously issued Permit 96030147. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, PM emissions from the sources of fugitive activities have been increased to reflect steel production increase outlined in PSD Permit 07120005. This limit ensures that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1R].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

7.6.7 Testing Requirements

The testing requirements are not set for the affected source of fugitive emissions.

7.6.8 Monitoring Requirements

The monitoring requirements are not set for the affected source of fugitive emissions.

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected source of fugitive emissions to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain approximate mileage for various trucks traveled over paved and unpaved roads (VMT).
- b. The Permittee shall maintain monthly and annual records of emissions (tons/mo and tons/yr) calculated in accordance with the compliance procedures of Condition 7.6.12.
- c. The Permittee shall maintain throughput for the aggregate handling and storage pile operations (tons/mo and tons/yr).
- d. The Permittee shall maintain the number of days that the storage piles are loaded into and out of (days/mo and days/yr).

7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected source of fugitive emissions from the permit requirements, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

The Permittee shall notify the Illinois EPA Compliance Section of noncompliance of the affected dust handling system with the permit requirements within 30 days of the violation pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected source of fugitive emissions.

7.6.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.6.1 and 7.6.6 shall be calculated based on the following emission factors and equation:

**Paved Road Derived Emission Factors**

Fugitive Source	Emission Factor (lb/VMT)
Slag Shipping Empty	1.15
Slag Truck Full	2.01
Empty Product Trucks	0.15
Full Product Trucks	0.28
Empty Scrap Trucks	0.15
Full Scrap Trucks	1.96
Miscellaneous Traffic	0.31

- $PM \text{ Emissions (tons)} = [(\text{appropriate emission factor (lb/VMT)}) * (\text{Vehicle miles traveled (VMT)})] / 2000 \text{ lb/ton}$

All above emission factors are derived using the following constants.

Silt Content (s) = 8%

Mean Vehicle Speed (S) = 5 mph

Mean Vehicle Weight (W) = 18 tons (Slag Shipping Empty)  
 = 40 tons (Slag Truck Full)  
 = 16.5 tons (Empty Product Truck)  
 = 38.5 tons (Full Product Truck)  
 = 16.5 tons (Empty Scrap Trucks)  
 = 38.5 tons (Full Scrap Trucks)  
 = 16.5 tons (Miscellaneous Traffic)

Surface Dust Loading (L) = 381 lb/Mile

Number of Traffic Lanes (n) = 2 Lanes

**Unpaved Road Derived Emission Factors**

Fugitive Source	Emission Factor (lb/VMT)
Empty Slag Truck	0.68
Full Slag Truck	1.15
Empty Scrap Trucks	0.36
Full Scrap Trucks	0.64

- $PM \text{ Emissions (tons)} = [(\text{appropriate emission factor (lb/VMT)}) * (\text{Vehicle miles traveled (VMT)})] / 2000 \text{ lb/ton}$

All above emission factors are derived using the following constants.

Particle Size Multiplier (k) = 0.36 (Empty Slag Truck)



- b. The condition described above is established in accordance with provisions 39.5(7) of the Act.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after (TO BE DETERMINED), unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

## 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of

such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	July 31
July - December	January 31

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

#### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
  - i. Illinois EPA - Air Compliance Unit  
  
 Illinois Environmental Protection Agency  
 Bureau of Air  
 Compliance & Enforcement Section (MC 40)  
 1021 North Grand Avenue East  
 P.O. Box 19276  
 Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Quality Planning Section  
  
 Illinois Environmental Protection Agency  
 Bureau of Air  
 Air Quality Planning Section (MC 39)  
 1021 North Grand Avenue East  
 P.O. Box 19276  
 Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
1021 North Grand Avenue East  
P.O. Box 19506  
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois, 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment),

practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

##### 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

##### 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

##### 9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

## 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

## 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

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 conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
  
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

##### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit.
  
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program.
  
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

#### 9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

**10.0 ATTACHMENTS**

Attachment 1 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

Attachment 2 Emissions of Particulate Matter from Process Emission Units

Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. The emissions of particulate matter into the atmosphere in any one hour period from the affected coating lines shall not exceed the allowable emission rates specified in the following equation:

$$E = A (P)^B$$

Where:

P = Process weight rate

E = Allowable emission rate

- i. For process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rates in excess of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units for which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

Attachment 3 - Compliance Assurance Monitoring (CAM) Plan

Table 1 - PSEU  
 Designation:  
 Pollutant:

EAF and associated emission units controlled by baghouses #1 and #2
PM

Indicators:

#1: Pressure Drop	#2:
-------------------	-----

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:

Continuous monitoring of a pressure drop across a baghouse	
--	--

THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:

An excursion is defined when the total pressure drop outside the range of 2 to 14 inches of water	
---	--

QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:

Outside the range of 2 to 14 inches of water	
--	--

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:

Monthly visual inspections	
----------------------------	--

VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:

N/A	
-----	--

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:

Periodic calibration of pressure gauges as required by manufacturer's procedures or being replaced	
--	--

THE MONITORING FREQUENCY:

Continuous	
------------	--

THE DATA COLLECTION PROCEDURES THAT WILL BE USED:

Total pressure drop is electronically recorded as four 15-minute averages per hour	
--	--

THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:

Hourly	
--------	--

#### Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, [www.epa.state.il.us](http://www.epa.state.il.us). This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)

[www.epa.state.il.us/air/permits/197-fee.pdf](http://www.epa.state.il.us/air/permits/197-fee.pdf)

AB:jws