

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF AIR

DIVISION of AIR POLLUTION CONTROL

PERMIT SECTION

PROJECT SUMMARY for the
DRAFT CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Alton Steel, Inc.
Attn: D. Jeannine Kelly, Environmental Attorney
#5 Cut Street
Alton, Illinois 62002

Illinois EPA ID Number: 119 010 AAE

Application Number: 96020056

Application Type: Significant Modification
Start of Public Comment Period: 04/16/2009
Close of Public Comment Period: 05/16/2009

Permit Engineer/Technical Contact: LeeAnne Kinsella, 217/782-2113

Community Relations/Comments Contact: Brad Frost, 217/782-7027

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

I. INTRODUCTION

This source has applied for a significant modification of their Clean Air Act Permit Program (CAAPP) operating permit. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of Illinois' Environmental Protection Act. The conditions in a CAAPP permit are enforceable by the Illinois Environmental Protection Agency (Illinois EPA), the USEPA, and the public. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A CAAPP permit contains conditions identifying the applicable state and federal air pollution control requirements that apply to a source. The permit also establishes emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit. Further explanations of the specific provisions of the draft CAAPP permit are contained in the attachments to this document, which also identify the various emission units at the source.

This significant modification includes proposed schedule for steps necessary to determine compliance strategies for meeting the June 30, 2008 deadline to meet the requirements for the control of contaminants from scrap and the December 28, 2010 deadline to meet opacity limits in 40 CFR 63.10686(b)(2) and submitting a PM CAM plan for the EAF #7 and #8 for the NESHAP for Area Sources: Electric Arc Furnace Steelmaking Facilities. ASI has added a new 550 gallon gasoline tank and removed the 1000 gallon gasoline tank and which is now subject to 40 CFR 63 Subpart CCCCCC NESHAP for area sources. Any other changes to this permit were typing/duplicate type errors that were corrected.

Minimill – Electric Arc Furnace Operations Overview

In a minimill, scrap metal is melted and refined in an electric arc furnace (EAF) to make steel products. Generally, molten steel is produced in an EAF and then tapped from the EAF to a ladle. The molten steel is then usually further refined with the addition of alloys. Semifinished product is then produced using continuous casting or ingot casting. Multiple finishing processes may then be used to produce finished steel products.

The input material for an EAF is typically 100 percent scrap. Cylindrical, refractory lined EAFs are equipped with carbon electrodes to be raised or lowered through the furnace roof. With electrodes retracted, the furnace roof can be

rotated aside to permit the charge of scrap steel by overhead crane. Electric current generates heat between the electrodes and through the scrap to melt the scrap.

The production of steel in an EAF is a batch process. Stages include charging, melting, refining, slagging, and tapping. During the charging stage scrap is introduced into the EAF. The charge can also include lime or carbon. Direct reduced iron (DRI), or other iron bearing material can supplement the scrap steel used as charge material. After the charging stage, the next step is the melting phase, during which electrical energy is supplied to the furnace interior. Sources such as oxy-fuel burners and oxygen lances may also be used to supply chemical energy. Oxy-fuel burners, which burn natural gas and oxygen, use convection and flame radiation to transfer heat to the scrap. During oxygen lancing, oxygen is injected directly into the melt; exothermic reactions with the iron and other components of the melt provide additional energy to assist in the melting of the scrap and remove excess carbon. Alloying elements may be added to achieve the desired composition. Refining of the melt can occur simultaneously with melting, especially in EAF operations where oxygen is introduced throughout the heat. During the refining process, impurities such as phosphorus, sulfur, silicon, and carbon are removed from the steel. These elements react with the oxygen to form oxides, which then become slag on top of the steel. The slag is typically removed by tipping the furnace backwards and pouring the slag out through a slag door. After completion of the heat, the tap hole is opened, and the steel is poured into a ladle for transfer to the next operation.

The operations which generate emissions during the EAF steelmaking process are charging of scrap, melting and refining, dumping slag, and tapping steel. These processes produce metal dusts and gaseous products. The composition of the particulate emitted can vary depending on the scrap composition and furnace additives such as fluxes that are added to aid in slag formation. Iron or iron oxides is the primary component of the particulate, and zinc, chromium, nickel oxides, lead, and cadmium may also be present. Gaseous pollutants such as NO_x and CO may also be emitted. Emissions from EAFs can be captured using direct shell evacuation to a baghouse. This is usually used in conjunction with a canopy hood in the roof that also vents to the baghouse.

II. GENERAL SOURCE DESCRIPTION

a. Nature of Source

The source is located at #5 Cut Street in Alton, Illinois. The source is a “mini-mill” steel mill that takes scrap steel and produces steel bars. This operation includes a melt shop and a rolling mill.

b. Ambient Air Quality Status for the Area

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires “a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.”)

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for PM_{2.5} and attainment or unclassifiable for all other criteria pollutants carbon monoxide, lead, nitrogen dioxide, ozone, PM₁₀, sulfur dioxide.

c. Major source status

1. The source requires a CAAPP permit as a major source of NO_x, SO₂, PM and CO emissions.
2. The source is considered a single source with Stein Mill Services, I.D. No. 119010AEA, located at 25 Hull Lane, Alton, Illinois. The Permittees have elected to obtain separate CAAPP permits for their operations.

d. Source Emissions

The following table lists annual emissions of criteria pollutants from this source, as reported in the Annual Emission Reports sent to the Illinois EPA.

Pollutant	Annual Emissions (tons)				
	2006	2005	2004	2003	2002
CO	439.17	272.73	277.17	55.80	0.0
NO _x	181.65	121.11	126.03	29.93	0.0
PM	27.78	16.40	37.49	12.21	0.0
SO ₂	105.62	64.95	65.75	14.86	0.0
VOM	26.60	16.61	16.85	3.53	0.0
Lead (top HAP)	0.47	0.18	0.33	0.0	0.0

III. NEW SOURCE REVIEW/TITLE I CONDITIONS

This draft permit contains terms and conditions that address the applicability of permit programs for new and modified sources under Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the draft permit by T1, T1R, or T1N. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this draft permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new conditions or revise such conditions in a Title I permit, those conditions are consistent with the information provided

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

in the CAAPP application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This facility is an area source for HAPs. Also their gasoline tank is subject to 40 CFR 63, CCCCCC for gasoline tanks, and 40 CFR 63, YYYYYY for Electric Arc Furnace Steelmaking Facilities because it is located at a source that is an area source for emissions for HAPs. Also throughput limits are being established for the tank due to the NESHAP requirements.

IV. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source. In addition, the draft permit requires the source to certify its compliance status on an annual basis. A review of the recent field inspections and other reports also suggest the facility to be in compliance at the time of issuance of this permit.

V. PROPOSED ILLINOIS EPA ACTION/REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the draft or proposed permit, pursuant to 35 IAC Part 252 and Sections 39.5(8) and (9) of the Illinois Environmental Protection Act. A final decision on the draft or proposed permit will not be made until the public, affected states, and USEPA have had an opportunity to comment. The Illinois EPA is not required to accept recommendations that are not based on applicable requirements. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 166.

ATTACHMENT 1: Summary of Source-Wide Requirements

The following table indicates the source-wide emissions control programs and planning requirements that are applicable to this source. These programs are addressed in Sections 5 and 6 of the draft permit.

Program/Plan	Applicable
Emissions Reduction Market System (ERMS)	No
Nitrogen Oxides (NO _x) Trading Program	No
Acid Rain Program	No
Compliance Assurance Monitoring (CAM) Plan	No
Fugitive Particulate Matter (PM) Operating Program ¹	Yes
Risk Management Plan (RMP)	No
PM ₁₀ Contingency Measure Plan	No

1. The fugitive PM operating program is required to significantly reduce fugitive particulate matter emissions from certain affected locations and facilities (35 IAC Part 212.309 – 212.312). Normally, elements of this program include, but are not limited to, addressing normal traffic pattern roads, parking facilities, and material piles and handling through the use of water, oils, or chemical dust suppressants.
 - Fugitive Emissions - Vehicle Traffic and Material Handling Emission Standards are 35 IAC 212.301 and 35 IAC 212.314 from the fugitive emissions for PM. Water or Chemical Dust Suppressant as Needed for Unpaved Roads. Non-applicability standards are 35 IAC 212.321 and 212.322: shall not apply to emission units, such as material handling, stock piles, unpaved roads, paved roads and parking lots of particulate matter, to which, because of disperse nature of such emission units, such rules can not reasonably be applied [35 IAC 212.323]; 35 IAC 212.316: shall not apply to emission units, such as material handling, stock piles, unpaved roads, paved roads and parking lots of particulate matter, because the units are not located in certain areas [35 IAC 212.324(a)(1)]. Monitoring requirements are set for the affected material handling, stock piles, unpaved roads, paved roads and parking lots of affected fugitive emissions per conditions 7.6.5 for Control Requirements and Work Practices, 7.6.9 for recordkeeping and source-wide monitoring requirements set forth in Condition 5.8 of this permit. Cooling Towers Fugitive Emissions Emission Standards are 35 IAC 212.322(a) from each affected cooling tower for PM. Non-applicability standards are 40 CFR Part 63, Subpart Q, Industrial Cooling Towers: The affected cooling towers not being subject to 40 CFR Part 63, Subpart Q, Industrial Cooling Towers, because the cooling towers are not operated with chromium-based water treatment chemicals; 35 IAC 212.316: Shall not apply to the affected cooling towers, because the units are not located in certain areas [35 IAC 212.324(a)(1)]. The

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Permittee shall perform operational inspections of the equipment that is important to the performance of the affected cooling tower. Any deficiency shall be noted and proper maintenance performed.

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

ATTACHMENT 2: Summary of Requirements for Specific Emission Units

The following tables include information on the requirements that apply to significant emission units at this source. The requirements are found in Section 7 of the draft permit, which is further divided into subsection, i.e., Section 7.1, 7.2, etc., for the different categories of units at the source. A separate table is provided for each subsection in Section 7 of the draft permit. An explanation of acronyms and abbreviations is contained in Section 2 of the draft permit.

Table 1 (Section 7.1 of the draft permit)

Emission Unit(s) – Electric Melt Shop	
Description	Electric Arc Furnace No. 7 (currently in active use); Electric Arc Furnace No. 8 (currently on reserve status); Ladle Preheaters; Continuous Caster; Tundish Preheater; Tundish Dryer; Tundish Shakeout; Cutting Torches;
Date Constructed	1965
Emission Control Equipment	EMS Baghouse
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 212.448 (35 IAC 212.322) from the EAF7 and EAF8 for PM; • 35 IAC 212.322 from the Tundish Shakeout for PM; • 35 IAC 212.123 from the Electric Melt Shop for Opacity; • 35 IAC 214.301 from EAF7, EAF8 and continuous caster for SO₂; • 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM, because the affected EAF7 and EAF8 have a significant modification to their initial CAAPP permit; • 40 CFR 63, YYYYYY for Electric Arc Furnace Steelmaking Facilities for HAPs.
Streamlining	

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Emission Unit(s) – Electric Melt Shop	
Title I Conditions	<ul style="list-style-type: none"> The draft permit contains limits on operation and emissions in Conditions 7.1.5 and 7.1.6. These limits were incorporated from Permit 00010015.
Non-applicability	<ul style="list-style-type: none"> 35 IAC 212.322: from the EAF7 and EAF8 affected Electric Melt Shop per 35 IAC 201.142, 201.143 [35 IAC 212.448]; 35 IAC 215.301: Organic material emissions from the affected Electric Melt Shop do not qualify as photochemically reactive material; 40 CFR 60, Subpart AAa: The EAF No. 7 and 8 Furnaces are existing EAFs; 35 IAC 216.121: oxy-fuel burners, three ladle preheaters, tundish preheater, tundish dryer and continuous caster of the affected Electric Melt Shop not being subject to 35 IAC 216.121, because the oxy-fuel burners, three ladle preheaters, tundish preheater, tundish dryer and continuous caster from the affected Electric Melt Shop are not defined as fuel combustion emission units [35 IAC 211.2470]; 35 IAC 212.321 or 212.322: The continuous caster of the affected Electric Melt Shop not being subject to 35 IAC 212.321 or 212.322 since it is subject to 35 IAC 212.450 [35 IAC 212.441];
Periodic Monitoring (other than basic regulatory requirements)	
Testing	<p>To demonstrate compliance with Section 7.1.3 and 7.1.6 conduct emission testing for EAF No. 7 to measure emissions of PM/PM₁₀, SO₂, NO_x, CO, VOM, and lead by March 31, 2009.</p> <p>Emission test(s) conducted to measure emissions of PM/PM₁₀, SO₂, NO_x, CO, VOM, and lead emissions from the EAF No. 8 furnace within 120 days after achieving the maximum production rate. To demonstrate compliance with Attachment 3 of the permit for 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM. Also 40 CFR 63, YYYYYY for Electric Arc Furnace Steelmaking Facilities for HAPs.</p> <p>During these measurements of PM/PM₁₀ emissions, observations of opacity shall also be conducted. The Permittee must perform a stack test during the third year and no more than 36 months following the previous stack test. If the stack test shows non-compliance with an emission limit specified in condition 7.1.6, the Permittee shall conduct annual stack tests for that pollutant until all stack tests for that pollutant over a three year period shows compliance. To demonstrate compliance with Section 5.7.2 for HAP Testing to Verify Minor Source Status.</p>

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Emission Unit(s) – Electric Melt Shop	
Emissions Monitoring	Opacity monitoring is used to demonstrate compliance with Section 7.1.3, 7.1.5 and 7.1.6 and to demonstrate compliance with Attachment 3 of the permit for 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM. 40 CFR 63, YYYYYY for Electric Arc Furnace Steelmaking Facilities for HAPs.
Operational Monitoring	Install, operate and maintain instrumentation for the following parameters of the capture system and baghouse(s) for the affected Electric Melt Shop. A. Fan motor amperes, and B. Furnace static pressure or ductwork static pressure prior to the baghouse(s).
Inspections	The inspections are use to demonstrate compliance with Section 7.1.5 and 7.1.8 and to demonstrate compliance with Attachment 3 of the permit for 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM. 40 CFR 63, YYYYYY for Electric Arc Furnace Steelmaking Facilities for HAPs.
Recordkeeping	<ul style="list-style-type: none"> Recordkeeping is used to demonstrate compliance with: Section 7.1.3 for 35 IAC 212.448 (35 IAC 212.321) from the EAF7 and EAF8 for PM; 35 IAC 212.321 Tundish Shakeout for PM; 35 IAC 212.123 from the Electric Melt Shop for Opacity; 35 IAC 214.301 from EAF7, EAF8 and continuous caster for SO₂; 7.1.5 for Control and Work Practices; and 7.1.6 for limits that were incorporated from Permit 00010015 and to demonstrate compliance with Attachment 3 of the permit for 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM. 40 CFR 63, YYYYYY for Electric Arc Furnace Steelmaking Facilities for HAPs.
Other	Notwithstanding the above, pursuant to 35 IAC 201.149, the Permittee may continue operation of the affected Electric Melt Shop furnace during a malfunction or breakdown with particulate matter emissions or opacity in excess of the above limits as necessary to prevent injury to person(s) or severe damage to equipment.
Reporting	
Prompt Reporting	See Attachment 3 Semi-annual reporting required for all other reporting requirements
Other Reporting	Malfunctions or breakdowns accompanied by excess emissions shall be reported the Illinois EPA's regional office by telephone as soon as possible upon the occurrence of excess emissions due to a malfunction or breakdown.

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Emission Unit(s) – Electric Melt Shop	
Other Information	
Footnotes	1 EAF # 7 is new per State rules purposes and existing for NSPS rules purposes.

Note: Periodic Monitoring Overview – Electric Arc Furnaces

The elements of periodic monitoring for specific emission units are summarized in the CAAPP permit itself, in Conditions 7.x.12. As a general matter, the permit includes a set of work practice and inspection requirements, testing requirements, monitoring requirements, recordkeeping requirements, and reporting requirements for each significant emission unit to address compliance with the applicable requirements that control emissions from the unit. To the extent that such requirements were lacking from applicable regulations or were considered insufficient, new or additional requirements were imposed. The result is sets of pollutant-specific periodic monitoring provisions for the various categories of units that the Illinois EPA has determined are both necessary and reasonable to address compliance with the emission control requirements that apply to such units. Various combinations of the requirements will suffice depending on the nature of a unit and the emission control requirements to which it is subject. What constitutes sufficient monitoring is left to the judgment of the permitting authority. The test for the adequacy of these “periodic monitoring” provision(s) is whether they yield reliable data from the relevant time period and is representative of the source’s compliance with a particular requirement.

Emissions can vary quite widely depending on the type of capture and control system, maintenance and modifications, as well as age and design. Another variability is the type and composition of scrap being charged and the quality control practices imposed on incoming scrap. In addition, the nature of the operation lends itself to vigilant maintenance practices and upkeep of the hoods, ducting, fans and auxiliary control systems. The nature of the emissions being metallic can be abrasive and damaging to the surfaces and bags of the capture and control systems as well. Therefore, degradation of the equipment is a component that also plays a role in minimizing emissions.

As a more general matter, the Illinois EPA has reviewed the provisions of the permit to ensure that it includes adequate periodic monitoring. This review has resulted in the inclusion of additional work practices, testing requirements and recordkeeping requirements in the permit for certain emission units. The pollutants of concern are PM, SO₂, NO_x, CO and HAP metals. Generally speaking the predominant type of emissions from an Electric Arc Furnace are the PM emissions which are also comprised of HAP’s. The control technologies and management practices used to control PM emissions also control metallic HAP emissions. These PM emissions generally take on the form of captured and uncaptured emissions. The captured emissions are controlled by a baghouse. The periodic monitoring scheme is to perform a stack test during the third year and no more than 36 months following the previous stack test. If the stack test shows non-compliance with an emission limit specified in condition 7.1.6, the Permittee

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires “a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.”)

shall conduct annual stack tests for that pollutant until all stack tests for that pollutant over a three year period shows compliance. This more rigorous schedule of testing is necessary due to the variabilities discussed above, but at the same time build in flexibility and incentive to maintain and operate the EAF in a manner that promotes minimizing emissions.

Because the operation also yields emissions that are not practical to capture and may be emitted from the building, the Illinois EPA has also added an opacity monitoring schedule to detect excessive opacity and ultimately PM. The schedules frequency and actions are based on the level of opacity emitted from the building.

The periodic monitoring scheme has been designed to detect short term and long term degradation in the operation and maintenance of the operations. These practices coupled with equipment monitoring and inspection, recordkeeping and reporting requirements is sufficient to ensure continuous compliance with the limitations in the permit for the EAF.

Table 1 (Section 7.2 of the draft permit)

Emission Unit - Ladle Metallurgy	
Description	Ladle Metallurgy Furnace; Lime Silo; Lime Surge Bin;
Date Constructed	1994
Emission Control Equipment	Baghouse and/or bin vents
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 212.321 from the ladle metallurgy furnace, lime silo and lime surge bin of the affected Ladle Metallurgy for PM; • 35 IAC 212.123 from the ladle metallurgy furnace, lime silo and lime surge bin of the affected Ladle Metallurgy for Opacity; • 35 IAC 214.301 from the ladle metallurgy furnace, lime silo and lime surge bin of the affected Ladle Metallurgy for SO₂.
Streamlining	
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Conditions 7.2.5 and 7.2.6. These limits were incorporated from Permit 00010015 and 93100108.
Non-applicability	<ul style="list-style-type: none"> • The affected Ladle Metallurgy is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected Ladle Metallurgy initial CAAPP application submitted prior to April 20, 1998.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	<p>Conduct emission testing for Ladle Metallurgy Furnace to measure emissions of PM/PM₁₀, SO₂, NO_x, CO, VOM, and lead by March 31, 2009.</p> <p>During these measurements of PM/PM₁₀ emissions, observations of opacity shall also be conducted.</p>
Emissions Monitoring	Opacity monitoring used to demonstrate compliance with Section 7.2.3, 7.2.5 and 7.2.6.

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Emission Unit - Ladle Metallurgy	
Operational Monitoring	Install, operate and maintain instrumentation for the following parameters of the capture system and baghouse(s) for the affected Ladle Metallurgy: A. Fan motor amperes, and B. Furnace static pressure or ductwork static pressure prior to the baghouse(s).
Inspections	Inspections used to demonstrate compliance with Section 7.2.5 and 7.2.8.
Recordkeeping	Recordkeeping used to demonstrate compliance with: 35 IAC 212.321 from the ladle metallurgy furnace, lime silo and lime surge bin of the affected Ladle Metallurgy for PM; 35 IAC 212.123 from the ladle metallurgy furnace, lime silo and lime surge bin of the affected Ladle Metallurgy for Opacity; 35 IAC 214.301 from the ladle metallurgy furnace, lime silo and lime surge bin of the affected Ladle Metallurgy for SO ₂ ; ; 7.2.5 for Control and Work Practices; and 7.2.6 for limits that were incorporated from Permit 00010015 and 93100108.
Other	
Reporting	
Prompt Reporting	See Attachment 3 Semi-annual reporting for all other requirements.
Other Reporting	
Other Information	
Footnotes	

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Table 1 (Section 7.3 of the draft permit)

Emission Unit - 14" Finishing Mill	
Description	14 inch Rolling Mill Reheat and Trial Bar Furnace; 14 inch Rolling Mill;
Date Constructed	Jan/1968
Emission Control Equipment	None
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 219.301 from the finishing mill for VOM • 35 IAC 212.123 from the finishing mill for Opacity;
Streamlining	
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Conditions 7.3.5 and 7.3.6. These limits were incorporated from Permit 00010015.
Non-applicability	<ul style="list-style-type: none"> • 35 IAC 216.121: The reheat and trial bar furnaces of the affected finishing mill not being subject to 35 IAC 216.121, because the reheat and trial bar furnaces of the affected finishing mill are not defined as fuel combustion emission source [35 IAC 211.2470]; • 35 IAC 217, Subpart B and Subpart C: The reheat furnace of the affected finishing mill not being subject to 35 IAC 217, Subpart B and Subpart C, because the reheat and trail bar furnaces of the affected finishing mill is not defined as fuel combustion emission source [35 IAC 211.2470]; • This permit is issued based on the reheat and trial bar furnaces and 14" rolling mill of the affected finishing mill not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected reheat furnace and 14" rolling mill does not use an add-on control device to achieve compliance with an emission limitation or standard.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	N/A
Emissions Monitoring	N/A
Operational Monitoring	Natural gas shall be the only fuel used in the rolling mill (reheat and trial bar furnaces).

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Emission Unit - 14" Finishing Mill	
Inspections	N/A
Recordkeeping	Recordkeeping used to demonstrate compliance with: 35 IAC 219.301 from the finishing mill for VOM; 35 IAC 212.123 from the finishing mill for Opacity; 7.3.5 for Control and Work Practices; and 7.3.6 for limits that were incorporated from Permit 00010015.
Other	
Reporting	
Prompt Reporting	See Attachment 3
Other Reporting	
Other Information	
Footnotes	

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Table 1 (Section 7.4 of the draft permit)

Emission Unit - Gasoline Storage Tank	
Description	575 Gallon Aboveground Gasoline Storage Tank;
Date Constructed	Feb/2009
Emission Control Equipment	Submerge Fill and Vapor Balance System
Applicable Rules and Requirements	
Emission Standards	<ul style="list-style-type: none"> • 35 IAC 219.122(b) from the tank for VOM; • 35 IAC 219.301 from the tank for VOM; • 35 IAC 219.583(a) from the tank for transfer gasoline (VOM); • 35 IAC 219.585 from the tank for transfer gasoline (VOM); • 40 CFR 63, CCCCCC for gasoline tanks for HAPs.
Streamlining	
Title I Conditions	<ul style="list-style-type: none"> • The draft permit contains limits on operation and emissions in Conditions 7.4.5 and 7.4.6. These limits were incorporated from Permit 00000001 and 08110047.
Non-applicability	<ul style="list-style-type: none"> • 40 CFR Part 60, Subpart Kb: The affected tank not being subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb, because the affected AST is less than 40 cubic meters (10,566 gallons); • 35 IAC 219.121: The affected tank not being subject to 35 IAC 219.121, because the affected tank is less than 40,000 gallons; • 35 IAC 219.122(a): The affected tank not being subject to 35 IAC 219.122(a), because the affected tank is less than 40,000 gallons; • This permit is issued based on the affected tank not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tank does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.
Periodic Monitoring (other than basic regulatory requirements)	
Testing	35 IAC 219.583(d)(5) for vapor collection system; 35 IAC 219.585(d) all sampling of gasoline required pursuant to the provisions of 35 IAC 219.585(e) and (f). 40 CFR 63, CCCCCC for gasoline tanks for HAPs.

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

Emission Unit - Gasoline Storage Tank	
Emissions Monitoring	
Operational Monitoring	The affected tank shall only be used for the storage of gasoline; and other conditions of 7.4.5. 40 CFR 63, CCCCCC for gasoline tanks for HAPs.
Inspections	Inspections used to demonstrate compliance with Section 7.4.5 and 7.4.8. 40 CFR 63, CCCCCC for gasoline tanks for HAPs.
Recordkeeping	To demonstrate compliance with: 35 IAC 219.122(b) from the tank for VOM; 35 IAC 219.301 from the tank for VOM; 35 IAC 219.583(a) from the tank for transfer gasoline (VOM). 40 CFR 63, CCCCCC for gasoline tanks for HAPs.
Other	
Reporting	
Prompt Reporting	See Attachment 3
Other Reporting	
Other Information	
Footnotes	

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

ATTACHMENT 3: Prompt Reporting of Deviations

Prompt reporting of deviations is critical in order to have timely notice of deviations and the opportunity to respond, if necessary. The effectiveness of the permit depends upon, among other important elements, timely and accurate reporting. The Illinois EPA, USEPA and the public rely on timely and accurate reports submitted by the Permittee to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence of a Permittee's good faith in disclosing deviations and describing the steps taken to return to compliance and prevent similar incidents.

Any occurrence that results in an excursion from any emission limitation, operating condition, or work practice standard as specified in this CAAPP permit is a deviation subject to prompt reporting. Additionally, any failure to comply with any permit term or condition is a deviation of that permit term or condition and must be reported to the Illinois EPA as a permit deviation. The deviation may or may not be a violation of an emission limitation or standard. A permit deviation can exist even though other indicators of compliance suggest that no emissions violation or exceedance has occurred. Reporting permit deviations does not necessarily result in enforcement action. The Illinois EPA has the discretion to take enforcement action for permit deviations that may or may not constitute an emission limitation or standard or the like, as necessary and appropriate.

Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act, which mirrors 40 CFR 70.6(a)(3)(iii)(B), requires prompt reporting of deviations from the permit requirements. The permitting authority (in this case, Illinois EPA) has the discretion to define "prompt" in relation to the degree and type of deviation likely to occur. Furthermore, Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act, which mirrors 40 CFR 70.6(a)(3)(iii)(A) requires that monitoring reports must be submitted at least every 6 months. Therefore, USEPA generally considers anything less than 6 months to be "prompt" as long as the selected time frame is justified appropriately (60 Fed. Reg. 36083, 36086 (July 13, 1995)).

The USEPA has stated that, for purposes of administrative efficiency and clarity, it is acceptable to define prompt in each individual permit. *Id.* The Illinois EPA has elected to follow this approach and defines prompt reporting on a permit by permit basis. In instances where the underlying applicable requirement contains "prompt" reporting, this frequency or a shorter frequency of reporting is the required timeframe used in this permit. Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA has developed a structured manner to determine the reporting approach used in this permit.

The Illinois EPA generally uses a time frame of 30 days to define prompt reporting of most deviations. Also, for certain permit conditions in individual permits, the Illinois EPA may require an alternate timeframe that is less than 30 days if the permit requirement justifies a shorter reporting time period. Under certain circumstances, EPA may establish a deviation reporting period longer than 30 days, but, in no event exceeding

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires "a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.")

6 months. Where it has established a deviation reporting period other than 30 days in an individual permit (specifically Section 7.x.10), the Illinois EPA has explained the reason for the alternative timeframe. (See Attachment 2 of this Project Summary.)

The timing for certain deviation reporting may be different when a source or emission unit at a source warrants reporting to address operation, independent of the occurrence of any deviations. This is the case for a source that is required to perform continuous monitoring for the emission unit, for which quarterly or semi-annual “monitoring” reports are appropriate. Where appropriate, reporting of deviations has generally been combined in, or coordinated with these quarterly or semi-annual reports, so that the overall performance of the plant can be reviewed in a comprehensive fashion. This will allow a more effective and efficient review of the overall performance of the source by the Illinois EPA and other interested parties, as well as by the source itself.

At the same time, there are certain deviations for which quicker reporting is appropriate. These are deviations for which individual attention or concern may be warranted by the Illinois EPA, USEPA, and other interested parties. Under this scenario, emphasis has been placed primarily on deviations that could represent substantial violations of applicable emission standards or lapses in control measures at the source. For these purposes, depending on the deviation, immediate notification may be required and preceded by a follow-up report submitted within 15 days, during which time the source may further assess the deviation and prepare its detailed plan of corrective action.

In determining the timeframe for prompt reporting, the Illinois EPA assesses a variety of criteria such as:

- historical ability to remain in continued compliance,
- level of public interest in a specific pollutant and/or source,
- seriousness of the deviation and potential to cause harm,
- importance of applicable requirement to achieving environmental goals,
- designation of the area (i.e., non-attainment or attainment),
- consistency among industry type and category,
- frequency of required continuous monitoring reports (i.e., quarterly),
- type of monitoring (inspection, emissions, operational, etc.), and
- air pollution control device type and operation

These prompt reporting decisions reflect the Illinois EPA’s consideration of the possible nature of deviations by different emission units and the responses that might be required or taken for those different types of deviations. As a consequence, the conditions for different emission units may identify types of deviations which include but are not limited to: 1) Immediate (or very quick) notification; 2) Notification within 30 days as the standard; or 3) Notification with regular quarterly or semi-annual monitoring reports.

The Illinois EPA’s decision to use the above stated prompt reporting approach for deviations as it pertains to establishing a shorter timeframe in certain circumstances reflects the criteria discussed as well as USEPA guidance on the topic.

(This Project Summary generally describes the source and explains the draft permit. This document has been prepared pursuant to Section 39.5(8)(b) of the Illinois Environmental Protection Act, which requires “a statement that sets forth the legal and factual basis for the draft CAAPP permit conditions.”)

- 40 CFR 71.6(a)(3)(iii)(B) specifies that certain potentially serious deviations must be reported within 24 or 48 hours, but provides for semi-annual reporting of other deviations. (Serious or severe consequences)
- FR Vol. 60, No. 134, July 13, 1995, pg. 36086 states that prompt should generally be defined as requiring reporting within two to ten days of the deviation, but longer time periods may be acceptable for a source with a low level of excess emissions. (intermediate consequences)
- Policy Statement typically referred to as the “Audit Policy” published by the USEPA defines prompt disclosure to be within 21 days of discovery. (Standard for most “pollutant limiting” related conditions)
- Responses to various States by USEPA regarding other States’ definition of prompt.

As a result, the Illinois EPA’s approach to prompt reporting for deviations as discussed herein is consistent with the requirements of 39.5(7)(f)(ii) of the Act as well as 40 CFR Part 70 and the CAA. This reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant individual attention. The timing for these event-specific notifications is necessary and appropriate as it gives the source enough time to conduct a thorough investigation into the causes of an event, collecting any necessary data, and to develop preventative measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation.

LAK:96020056:psj