

Statement of Basis

for the DRAFT CAAPP Permit for:

Source Name:

Phoenix Services, Inc.

Statement of Basis No.: 07080049-1408
I.D. No.: 031258AAS
Permit No.: 07080049
Date Prepared: August 11, 2014

Permitting Authority:

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
217/785-1705

This Statement of Basis is being provided to USEPA and any interested parties as required by Section 39.5(8)(b) of the Illinois Environmental Protection Act.

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PREFACE

Reason For This Document

This document is a requirement of the permitting authority in accordance with 502(a) of the Clean Air Act, 40 CFR 70.7(a)(5), and Section 39.5(8)(b) of the Illinois Environmental Protection Act. Section 39.5(8)(b) of the Illinois Environmental Protection Act states the following:

“The Agency shall prepare a statement that sets forth the legal and factual basis for the Draft CAAPP permit conditions, including references to the applicable statutory or regulatory provisions.”

Purpose Of This Document

The purpose of this Statement of Basis is to provide discussion regarding the development of this Draft CAAPP Permit. This document would also provide the permitting authority, the public, the source, and the USEPA with the applicability and technical matters that form the basis of the Draft CAAPP Permit.

Summary Of Historical Actions Leading Up To Today's Permitting Action

The source had not had any previously issued CAAPP Permit.

Limitations

This Statement of Basis is not enforceable and only sets forth the legal and factual basis for the Draft CAAPP Permit Conditions (Chapters I and II). Chapter III contains supplemental material that would assist in educating interested parties about this source and the Draft CAAPP Permit. The Statement of Basis does not shield the source from enforcement actions or its responsibility to comply with existing or future applicable regulations. Nor does the Statement of Basis constitute a defense to a violation of the Federal Clean Air Act or the Illinois Environmental Protection Act including implementing regulations.

This document does not purport to establish policy or guidance.

INTRODUCTION

The Clean Air Act Permit Program (CAAPP) is the operating permit program established in Illinois for major stationary sources as required by Title V of the federal Clean Air Act and Section 39.5 of the Illinois Environmental Protection Act. The Title V Permit Program (CAAPP) is the primary mechanism to apply the various air pollution control requirements established by the Clean Air Act to major sources, defined in accordance with Title V of the Clean Air Act. The Draft CAAPP Permit contains conditions identifying the state and federal applicable requirements that apply to the source. The Draft CAAPP Permit also establishes the necessary monitoring and compliance demonstrations. The source must implement this monitoring to demonstrate that the source is operating in accordance with the applicable requirements of the permit. The Draft CAAPP Permit identifies all applicable requirements for the various emission units as well as establishes detailed provisions for testing, monitoring, recordkeeping, and reporting to demonstrate compliance with the Clean Air Act. Further explanations of the specific provisions of the Draft CAAPP Permit are contained in the following Chapters of this Statement of Basis.

The Illinois EPA has focused in on key elements of the permit that relate to the requirements of the CAAPP Program:

- The area surrounding Phoenix Services, Inc. has the potential for environmental justice ("EJ") concerns. Therefore, the Illinois EPA has taken a careful review of the monitoring in the DRAFT CAAPP permit and has provided for public input. Given the nature of the source to be a ferrous recovery and a screening plant, the Draft CAAPP permit's monitoring requirements can be found in Section 3.7 of this Statement of Basis and a discussion for Environmental Justice can be found in Section 3.1.

In addition, the Illinois EPA has committed substantial resources and effort in the development of an acceptable Statement of Basis (this document) that would meet the expectations of USEPA, Region 5. As a result, this document contains discussions that address applicability determinations, periodic monitoring, streamlining, prompt reporting, and SSM authorizations (as necessary). These discussions involve, where necessary, a brief description and justification for the resulting conditions and terms in this Draft CAAPP Permit. This document begins by discussing the legal basis for the contents of the Draft CAAPP Permit, moves into the factual description of the permit, and ends with supplemental information that has been provided to further assist with the understanding of the background and genesis of the permit content.

It is Illinois EPA's preliminary determination that this source's Permit Application meets the standards for issuance of a "Final" CAAPP Permit as stipulated in Section 39.5(10)(a) of the Illinois Environmental Protection Act (see Chapter I - Section 1.2 of this document). The Illinois EPA is therefore initiating the necessary procedural requirements to issue a Final CAAPP Permit. The Illinois EPA has posted the Draft CAAPP permit and this Statement of Basis on USEPA website:

<http://www.epa.gov/reg5oair/permits/ilonline.html>

CHAPTER I – LEGAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

1.1 Legal Basis for Program

The Illinois EPA's state operating permit program for major sources established to meet the requirements of 40 CFR Part 70 are found at Section 39.5 of the Illinois Environmental Protection Act [415 ILCS 5/39.5]. The program is called the Clean Air Act Permitting Program (CAAPP). The underlying statutory authority is found in the Illinois Environmental Protection Act at 415 ILCS 5/39.5. The CAAPP was given final full approval by USEPA on December 4, 2001 (see 66 FR 62946).

1.2 Legal Basis for Issuance of CAAPP Permit

In accordance with Section 39.5(10)(a) of the Illinois Environmental Protection Act, the Illinois EPA may only issue a CAAPP Permit if all of the following standards for issuance have been met:

- The applicant has submitted a complete and certified application for a permit, permit modification, or permit renewal consistent with Sections 39.5(5) and (14) of the Illinois Environmental Protection Act, as applicable, and applicable regulations (Section a. below);
- The applicant has submitted with its complete application an approvable compliance plan, including a schedule for achieving compliance, consistent with Section 39.5(5) of the Illinois Environmental Protection Act and applicable regulations (Section b. below);
- The applicant has timely paid the fees required pursuant to Section 39.5(18) of the Illinois Environmental Protection Act and applicable regulations (Section c. below); and
- The applicant has provided any additional information as requested by the Illinois EPA (Section d. below).

a. Application Status

The source submitted an application for a New CAAPP Permit on August 21, 2007. The source is currently operating under an application shield resultant from a timely and complete application submittal. This Draft CAAPP Permit addresses application content and necessary revisions to meet the requirements for issuance of the permit.

b. Present Compliance Status

At the time of this Draft CAAPP Permit, there were no pending State or Federal enforcement actions against the source; therefore, a Compliance Schedule is not required for this source. The source submitted an approvable Compliance Plan as part of its Certified Permit Application. The source has certified compliance with all applicable rules and regulations. In addition, the draft permit requires the source to certify its compliance status on an annual basis.

c. Payment of Fees

The source is current on payment of all fees associated with operation of the emission units.

d. Additional Information

The source provided all the necessary additional application material as requested by the Illinois EPA.

1.3 Legal Basis for Conditions in the CAAPP Permit

This industrial source is subject to a variety of SIP regulations, which are the legal basis for the conditions in this permit (see Sections a. and b. below). Also, the CAAPP provides the legal basis for additional requirements such as periodic monitoring, reporting, and recordkeeping. The following list summarizes those regulations that form the legal basis for the conditions in this Draft CAAPP Permit and are provided in the permit itself as the origin and authority.

a. Applicable Federal Regulations

This source does not operate emission units that are subject to Federal regulations.

b. Applicable SIP Regulations

This source operates emission units that are subject to the following SIP regulations:

- 35 IAC Part 201 - Permits And General Provisions
- 35 IAC Part 212 - Visible And Particulate Matter Emissions
- 35 IAC Part 254 - Annual Emissions Report

c. Other Applicable Requirements

There are no other applicable requirements for this source.

CHAPTER II - FACTUAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

2.1 Source History

There is no significant source history warranting discussion for this source.

2.2 Description of Source

SIC Code: 3295

County: Cook

The source operates a ferrous recovery and a screening plant controlled by wet suppression. Slag is obtained from the steelmaking activities of the associated ArcelorMittal Riverdale, Inc. facility.

The source contains the following processes:

<i>Emission Units</i>		<i>Description</i>
Slag Processing (Main Plant)	Slag Screening	Slag screening operations, which sort various streams of slag and metallic scraps by size.
	Slag Crushing	Slag crushing to reduce the size of the slag for screening.
	Slag Stacking	Sized slag and metallic scrap stacking using conveyors.
	Slag Conveying	Sized slag and metallic scrap conveying using conveyors. Sized slag and metallic scrap are transported to the slag crusher, screens, or storage piles.
	Magnet Drum Separating	A screening device, which uses magnets to separates the non-metallic slag from the metallic scraps. The separated streams are stacked into separate storage piles according.
Fines Processing (Screening Plant)	Slag Screening	Slag screening operations which sort various streams of slag and metallic scraps by size.
	Slag Conveying	Sized slag and metallic scrap conveying using conveyors. Sized slag and metallic scrap are transported to the slag crusher, screens, or storage piles.
Portable Crushing and Screening Plant	Slag Screening	Slag screening operations which sort various streams of slag and metallic scraps by size.
	Slag Crushing	Slag crushing to reduce the size of the slag for screening.
	Slag Conveying	Sized slag and metallic scrap conveying using conveyors. Sized slag and metallic scrap are transported to the slag crusher, screens, or storage piles.
	Feed Hopper	Feed slag to conveyors for processing
	Storage Piles	Stage slag for processing and storage of processed slag.
Fugitive PM Emissions	Vehicular Traffic on Roadways, Parking Lots	Particulate Matter emissions caused by moving vehicles that creates particulate matter (road dust) emissions on paved and unpaved roadways.

<i>Emission Units</i>	<i>Description</i>
Loading/Unloading Operations	Particulate Matter emissions are generated from loading/unloading operations.
Storage Piles and Associated Activities	Particulate Matter emissions are generated from fugitive dust from storage piles.

2.3 Single Source Status

The source is considered a single source with ArcelorMittal Riverdale, Inc., I.D. No. 031258ABR, located at 13500 South Perry Avenue, Riverdale, IL 60827.

Under both 40 CFR 52.21(b)(5) and Section 39.5 of the Illinois Environmental Protection Act, different sources can be “aggregated” and considered a single stationary source for PSD and Title V operating permit purposes. They can be considered a single stationary source if they (1) belong to the same industrial grouping or operate as a support facility, (2) are located on contiguous or adjacent properties, and (3) are under common control/ownership.

Additionally, for this single source status determination:

- The sources have a support facility relationship to one another as Phoenix Services, Inc. is provided more than 50 percent of its input from ArcelorMittal Riverdale, Inc.;
- The sources are considered contiguous or adjacent to each other (i.e., the sources share a common address as Phoenix Services, Inc. are located on the ArcelorMittal Riverdale, Inc. property); and
- The sources are considered under common control, as there is a process/production co-dependency between the two facilities.

2.4 Ambient Air Quality Status for the Area

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and/or PM_{2.5} and attainment or unclassifiable for all other criteria pollutants (carbon monoxide, lead, nitrogen dioxide, ozone, PM_{2.5}, PM₁₀, sulfur dioxide). (See 40 CFR Part 81 – Designation of Areas for Air Quality Planning Purposes)

2.5 Source Status

The source requires a CAAPP Permit because the source is considered a single source with ArcelorMittal Riverdale, Inc., I.D. No. 031258ABR, located at 13500 South Perry Avenue, Riverdale, IL 60827. The Permittees have elected to obtain separate CAAPP Permits for their operations (see also Section 2.3 above) and each is responsible for compliance with all conditions specified in the CAAPP permit issued for their operations.

The source does not maintain synthetic minor limits for any regulated pollutants. This source is not considered a natural minor for any regulated pollutants.

Based on available data, this source is a major source of emissions for GHG, because the estimated potential emissions of GHG that are more than 100 tons

per year (mass) and 100,000 tons per year (CO₂e). ArcelorMittal Riverdale, Inc., single source with Phoenix Services, Inc. see 2.3, voluntarily submitted data for actual emissions of GHGs in its 2012 AER, reporting actual annual emissions of GHG of 144,917 tons per year.

This source is not currently subject to any “applicable requirements”, as defined by Section 39.5(1) of the Act, for emissions of greenhouse gases (GHG) as defined by 40 CFR 86.1818-12(a), as referenced by 40 CFR 52.21(b)(49)(i). There are no GHG-related requirements under the Illinois Environmental Protection Act, Illinois’ State Implementation Plan, or the Clean Air Act that apply to this facility, including terms or conditions in a Construction Permit addressing emissions of GHG or BACT for emissions of GHG from a major project at this facility under the PSD rules. In particular, the USEPA’s Mandatory Reporting Rule for GHG emissions, 40 CFR Part 98, does not constitute an “applicable requirement” because it was adopted under the authority of Sections 114(a)(1) and 208 of the Clean Air Act. This permit also does not relieve the Permittee from the legal obligation to comply with the relevant provisions of the Mandatory Reporting Rule for this facility.

2.6 Annual Emissions

The following table lists annual emissions (tons) of criteria pollutants for this source, as reported in the Annual Emission Reports (AER) sent to the Illinois EPA:

<i>Pollutant</i>	<i>2013</i>	<i>2012</i>	<i>2011</i>	<i>2010</i>
CO	0.00	0.00	0.00	0.00
NO _x	0.00	0.00	0.00	0.00
PM	4.98	4.67	3.85	5.22
SO ₂	0.00	---	---	---
VOM	0.00	---	---	---
CO _{2E}	0.00	0.00	0.00	0.00
HAP		---	---	---

NOTE: The above reported annual emissions are from Phoenix Services LLC only and do not include reported annual emissions from ArcelorMittal Riverdale LLC.

2.7 Fee Schedule

The following table lists the approved annual fee schedule (tons) submitted in the Source’s permit application:

<i>Pollutant</i>	<i>Tons/Year</i>
Volatile Organic Material (VOM)	---
Sulfur Dioxide (SO ₂)	---
Particulate Matter (PM)	10.5
Nitrogen Oxides (NO _x)	---
HAP, not included in VOM or PM (HAP)	---
Total	10.5

2.8 SIP Permit Facts (T1 Limits)

CAAPP Permits must address all “applicable requirements”, which includes the terms and conditions of preconstruction permits issued under regulations approved by USEPA in accordance with Title I of the CAA (See definition of

applicable requirements in Section 39.5(1) of the Illinois Environmental Protection Act). Preconstruction permits, commonly referred to in Illinois as Construction Permits, derive from the New Source Review ("NSR") permit programs required by Title I of the CAA. These programs include the two major NSR permit programs: (1) the Prevention of Significant Deterioration ("PSD") program¹ and (2) the nonattainment NSR program.² These programs also encompass state construction permit programs for projects that are not major.

In the CAAPP or Illinois's Title V permit program, the Illinois EPA's practice is to identify requirements that are carried over from an earlier Title I permit into a New or Renewed CAAPP Permit as "TI" conditions (i.e., Title I conditions). Title I Conditions that are revised as part of their incorporation into a CAAPP Permit are further designated as "TIR". Title I Conditions that are newly established through a CAAPP Permit are designated as "TIN". It is important that Title I Conditions be identified in a CAAPP Permit because these conditions will not expire when the CAAPP Permit expires. Because the underlying authority for Title I Conditions comes from Title I of the CAA and their initial establishment in Title I Permits, the effectiveness of T1 Conditions derives from Title I of the CAA rather than being linked to Title V of the A. For "changes" to be made to Title I Conditions, they must either cease to be applicable based on obvious circumstances, e.g., the subject emission unit is permanently shut down, or appropriate Title I procedures must be followed to change the conditions.

- Newly Issued Construction Permits:

<i>Permit No.</i>	<i>Date Issued</i>	<i>Subject</i>
84030043	09/18/96	Steel scrap and slag reclamation and slag away
94020007	03/14/94	Ferrous recovery plant
08050023	08/12/08	Portable Plant

- The Illinois EPA has not established any T1R or T1N Limits in this Draft CAAPP permit.
- There are no extraneous or obsolete T1 conditions for the source.

Chapter III - Supplemental Discussions regarding the Permit

The information provided in this Chapter of the Statement of Basis is being provided to assist interested parties in understanding what additional information may have been relied on to support this draft CAAPP permit.

3.1 Environmental Justice Discussions

Phoenix Services LLC is located in a potential environmental justice ("EJ") area. The Illinois EPA Bureau of Air screens all permitting transactions to determine if the source is located in a potential EJ area. The screening is based on demographic criteria. Specifically, the Illinois EPA determines if a source is in or near an area that is predominantly low-income and/or minority.

An important component of EJ is early and meaningful public participation. Prior to issuance of the public notice, the Illinois EPA sent an EJ Notification letter informing known potentially interested parties of the permit request in order for the Illinois EPA to gauge public interest and conduct public outreach as warranted.

As a general matter, having a facility subject to a CAAPP Permit provides benefits. CAAPP Permits require more reporting on a facility's compliance status than is required by underlying state operating permits. For example, the requirements for semi-annual reports for all monitoring and for annual compliance certifications only become applicable upon the effectiveness of a CAAPP Permit. In addition, CAAPP Permits generally enhance mechanisms by which sources must comply with applicable regulations. CAAPP Permits add to the compliance checks and balances put on facilities.

With this Statement of Basis, the Illinois EPA has made available in a single comprehensive document, a discussion for the applicable emission limitations, standards, and other enforceable terms and conditions, as well as attendant monitoring, reporting, recordkeeping, and certifications to assure compliance.

For further reference, the Illinois EPA's EJ policy is located at "<http://www.epa.state.il.us/environmental-justice/policy.html>". The Illinois EPA's EJ Public Participation Policy may be found at www.epa.state.il.us/environmental-justice/public-participation-policy.pdf.

3.2 Emission Testing Results

The source, at the time of this draft permit, has not been required to perform any emissions testing.

3.3 Compliance Reports (Annual Certifications, Semiannual Monitoring, NESHAP, etc.)

A review of the source's compliance reports demonstrates the sources ability to comply with all applicable requirements.

3.4 Field Inspection Results

A review of the source's latest field inspection report dated October 06, 2009 demonstrates the source's ability to comply with all applicable requirements.

3.5 Historical Non-Compliance

- Illinois EPA v Heckett, a division of Harsco Corporation, Case PCB 85-38
Heckett applied for and was granted a permit for the slag-away process based on its application, which stipulated that slag pots were to be lined using a layer of dry processed slag. Heckett failed to renew that underlying permit, and failed to request a modification to allow materials other than dry processed slag to line the pots. The pot lining process was discontinued because of explosive concerns caused by moisture in the slag, and was alleged to violate certain Board rules. A complaint was filed with the Board, a renewal operating permit was sought after which was denied, and on January 13, 1986 Heckett appealed that denial. Ultimately, this series of actions resulted in a Board ordered settlement establishing certain conditions on the behalf of the Permittee and an Agency issued operating permit.

3.6 Source Wide Justifications and Rationale

Applicable Requirements Summary		
Applicable Requirement	Type	Location
Fugitive Particulate Matter (35 IAC 212.301 and 35 IAC 212.314)	Applicable Standard	See the Permit, Condition 3.1(a)

Visible Emissions (i.e., Opacity)

- ✓ Monitoring as follows (Condition 3.1(a)(ii))
 - o Upon request, daily observations of visible emissions shall be conducted for a week.
- ✓ Recordkeeping as follows (Condition 3.1(a)(ii)):
 - o Records of the observations if requested.
- ✓ Reporting as follows (Condition 3.5(a)(i)):
 - o Report to IEPA any deviation within 30 days.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a recent history of non-compliance with respect to the applicable standard.
- Monitoring is consistent with other sources in this source category.
- Total emission rates are small, i.e., less than 6 total tons of PM reported from the source over the last three years.
- Control practices from the Fugitive Operating Program (Condition 3.2(a)), as well as Material Handling and Processing Operations section (Condition 4.1) and Fugitive PM Emissions (Condition 4.2).

Non-Applicability Discussion

Complex source-wide non-applicability determinations were not made for this source.

Prompt Reporting Discussion

Prompt reporting of deviations for source wide emission units has been established as 30 days. See rationale in Chapter III Section 3.9.

3.7 Emission Unit Justifications and Rationale

a. Material Handling and Processing Operations		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123(a))	Applicable Standard	See the Permit, Condition 4.1.2(a)(i)(A)
Opacity Requirement (35 IAC 212.316(b))	Applicable Standard	See the Permit, Condition 4.1.2(a)(i)(B)
PM Requirement (35 IAC 212.321(a))	Applicable Standard	See the Permit, Condition 4.1.2(b)(i)(A)
PM Requirement	Applicable Limit	See the Permit, Condition 4.1.2(b)(i)(B) and (C)
HAP Requirement	Applicable Limit	See the Permit, Condition 4.1.2(c)(i)
Operational and Production, Requirement	Applicable Limit	See the Permit, Condition 4.1.2(d)(i)
Work Practice Requirement	Applicable Work Practice	See the Permit, Condition 4.1.2(e)(i)
Work Practice Requirement (IPCB Order #PCB85-38)	Applicable Work Practice	See the Permit, Condition 4.1.2(f)(i)(A)
Work Practice Requirement	Applicable Work Practice	See the Permit, Condition 4.1.2(f)(i)(B)

Visible Emissions (i.e., Opacity)

- ✓ Monitoring as follows (Condition 4.1.2(a)(ii)(A))
 - o Semi-annual visible emission observations using Method 22, corrective action within 4 hours, and follow-up opacity observation using Method 9 within 1 week if visible emissions persist after the corrective action.

- ✓ Recordkeeping as follows (Condition 4.1.2(a)(ii)(B), (C) and (D)):
 - o Records for each Method 22 observation, corrective action if required, and for each Method 9 measurement if required.
 - o Records of control measures needed for compliance for any fugitive particulate matter from emission units subject to 35 IAC 212.316.

- ✓ Reporting as follows (Condition 4.1.5(a), and (b)):
 - o An annual report containing a summary of such information for records of control measures needed for compliance for any fugitive particulate matter emission unit subject to 35 IAC 212.316.
 - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a recent history of non-compliance with respect to the applicable standard. See Section 3.5.
- Monitoring is consistent with other sources in this source category.

- Total emission rates are small.
- Source indicated the feed material is pre-wetted prior to processing giving the material inherent moisture and minimizing PM emissions from occurring during processing.
- Moisture content and PM emissions are also regularly monitored by the source as part of the Fugitive PM Operating Program which is incorporated by reference into the CAAPP Permit.
- These emission units are subject to a more restrictive opacity limit for certain sources in the Chicago area and the source must maintain specific recordkeeping/reporting requirements in 35 IAC 212.316.

Overall, the required control practices create a high moisture content that directly minimizes visible and particulate emissions throughout the material handling and processing operations. Additionally, the source reports less than 6 total tons of PM over the last three years.

Particulate Matter Emission

- ✓ Monitoring as follows (Condition 4.1.2(b)(ii)(A))
 - o Annual inspections of the control measures (i.e., water sprays)
- ✓ Recordkeeping as follows (Condition 4.1.2(b)(ii)(B)):
 - o Methods used by the Permittee to determine emissions of PM.
 - o Hours of operation and throughput for each emission unit.
 - o Emissions of PM from each emission unit.
 - o Inspections of controls (i.e., water sprays)
 - o Amount of water used.
- ✓ Reporting as follows (Condition 4.1.5(a)):
 - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a recent history of non-compliance with respect to the applicable standard or limits. See Section 3.5.
- Monitoring is consistent with other sources in this source category.
- Total emission rates are small.
- Emission limitations in question are small (e.g., 1.28~6.69lb/hr and 0.099~9.74 tons/year).
- The records required are sufficient to demonstrate compliance with the process weight rate standard and particulate limits. Specifically, the hours of operation, throughputs, and calculation methods used to determine PM emissions. PM emissions in lb/hr can be determined from the monthly records of the hours of operation and the emissions of PM.
- Additionally, the visible emission control practices and monitoring previously discussed directly contribute to the minimization of particulate emissions.
- Annual inspections of water sprays sufficient because material is pre-wetted and continuous operation of the water sprays are not necessary to control PM emissions. Annual inspections will ensure water spray is available when needed to supplement the pre-wetted material or other possible emergency situations involving PM emissions.

Overall, the required control practices create a high moisture content that directly minimizes visible and particulate emissions throughout the material handling and processing operations. Additionally, the source reports less than 6 total tons of PM over the last three years.

HAP Emissions

- ✓ Recordkeeping as follows (Condition 4.1.2(c)(ii)(A)):
 - o Methods used by the Permittee to determine emissions of HAP-PM.
 - o Hours of operation and throughput for each emission unit.
 - o Emissions of HAP-PM from each emission unit.
- ✓ Reporting as follows (Condition 4.1.5(a)):
 - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a recent history of non-compliance with respect to the applicable standard or limits.
- Monitoring is consistent with other sources in this source category.
- Total emission rates are small, i.e., less than 6 total tons of PM reported from the source over the last three years.
- Emission limitations in question are small (i.e., 0.11 lb/hr and 0.44 tons/year).
- The records required are sufficient to demonstrate compliance with the HAP-PM limits. Specifically, the hours of operation, throughputs, and calculation methods used to determine HAP-PM emissions. HAP-PM emissions in lb/hr can be determined from the monthly records of the hours of operation and the emissions of PM.
- Additionally, the particulate matter and visible emission control practices and monitoring previously discussed directly contribute to the minimization of HAP-PM emissions.

Operational and Production Requirements

- ✓ Recordkeeping as follows (Condition 4.1.2(d)(ii)(A)):
 - o Hours of operation, throughput, and processing rate for each emission unit.
- ✓ Reporting as follows (Condition 4.1.5(a)):
 - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a recent history of non-compliance with respect to the applicable standard or limits.
- Monitoring is consistent with other sources in this source category.
- Total emission rates are small, i.e., less than 6 total tons of PM reported from the source over the last three years.
- The records required are sufficient to demonstrate compliance with the applicable limitations in the "Operational and Production Requirements".

Work Practice Requirements

- ✓ Monitoring as follows (Condition 4.1.2(e)(ii)(A) and (B))
 - o Annual inspections of the control measures (i.e., water sprays).
- ✓ Recordkeeping as follows (Condition 4.1.2(e)(ii)(C), (D), and (E)):
 - o Inspection reports related to the control measures.
 - o Amount of water used.
 - o Maintenance and repair logs.
- ✓ Reporting as follows (Condition 4.1.5(a)):
 - o Prompt reporting of deviations within 30 days to the IEPA.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Monitoring is consistent with other sources in this source category.
- Periodic inspections of specific emission units not considered to be necessary because source is required to routinely monitor for opacity and PM emissions. Failure of the emission units noted in this section of permit would cause source to suspend processing until the emissions units are repaired. Opacity and PM emissions are less likely to be generated when the emission units are not in operation.
- The records required are sufficient to demonstrate compliance with the applicable requirements in the "Work Practice Requirement".

Work Practice Requirements - IPCB Order #85-38

- ✓ Recordkeeping as follows (Condition 4.1.2(f)(ii)(A)):
 - o Records required which demonstrate slag used for pot lining is consistently screened and utilized as detailed in the IPCB Board Order.
 - o Notifications and reporting requirements from the IPCB Board Order are also imposed in permit conditions.
- ✓ Reporting as follows (Condition 4.1.5(a)):
 - o Prompt reporting of deviations within 30 days to the IEPA.

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

b. Fugitive PM Emissions		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123(a))	Applicable Standard	See the Permit, Condition 4.2.2(a)(i)(A)

b. Fugitive PM Emissions		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.316(c))	Applicable Standard	See the Permit, Condition 4.2.2(a)(i)(B)
Opacity Requirement (35 IAC 212.316(d))	Applicable Standard	See the Permit, Condition 4.2.2(a)(i)(C)
Opacity Requirement (35 IAC 212.316(f))	Applicable Standard	See the Permit, Condition 4.2.2(a)(i)(D)
PM Requirement (35 IAC 212.301)	Applicable Standard	See the Permit, Condition 4.2.2(b)(i)
Operational and Production, Requirement (35 IAC 212.306)	Applicable Standard	See the Permit, Condition 4.2.2(c)(i)
Work Practice Requirement (39.5(7)(a) & (b) of the Act)	Applicable Work Practice	See the Permit, Condition 4.2.2(d)(i)

Visible Emissions (i.e., Opacity)

- ✓ Monitoring as follows (Condition 4.2.2(a)(ii)(A))
 - The source shall monitor the visible emissions associated with the fugitive dust using Method 22 and/or Method 9 anytime that such monitoring is requested by the IEPA, but at least on semi-annual basis

- ✓ Recordkeeping as follows (Condition 4.2.2(a)(ii)(B-D)):
 - Records for each required Method 22 observation
 - Records for each required Method 9 measurement
 - Records of application of control measures needed to comply with opacity limits in 35 IAC 212.316 and any IEPA submittals as required by 35 IAC 212.316(g)

- ✓ Reporting as follows (Condition 4.2.5):
 - Permittee required to promptly notify IEPA of deviations of applicable requirement specified in permit conditions in Section 4.2.2.
 - Permittee required to notify IEPA of any other deviations in Semiannual Monitoring Report.
 - Permittee required to submit quarterly report to IEPA as required by 35 IAC 212.316(g)(5)

Particulate Matter Emission

- ✓ Monitoring as follows (Condition 4.2.2(b)(ii))
 - Permittee required to monitor for visible emissions of fugitive particular matter from the source, upon request of IEPA, to address compliance with 35 IAC 212.301. For this purpose, daily observations shall be conducted for a week for particular area(s) of concern at the source, as specified in the request, observations shall begin either within one day or three days of receipt of a written request from the IEPA.

- ✓ Recordkeeping as follows (Condition 4.2.2(b)(ii)):

- Permittee required to maintain records for any observations requested by the IEPA which contain the specific information identified in Permit Condition 3.1(a)(ii)
- ✓ Reporting as follows (Condition 4.2.5):
 - Permittee required to promptly notify IEPA of deviations of applicable requirement specified in permit conditions in Section 4.2.2.
 - Permittee required to notify IEPA of any other deviations in Semiannual Monitoring Report.

Operational and Production, Requirement

- ✓ Monitoring as follows (Condition 4.2.2(c)(ii))
 - Permittee required to operate the source under the provisions of the Fugitive PM Operating Program which they have prepared and submitted to the IEPA on August 21, 2007.
 - Revisions to the Fugitive PM Operating Program must submitted to the IEPA with 30 days of such revisions. Any revisions must be consistent with the requirements in 35 IAC 212.310(a)-(g) and Permit Condition 3.2(a)(i).
- ✓ Recordkeeping as follows (Condition 4.2.2(c)(ii)):
 - Copy of the current Fugitive PM Operating and any subsequent revisions.
 - Records of any activities required to be completed by the Fugitive PM Operation Plan.
- ✓ Reporting as follows (Condition 4.2.5):
 - Permittee required to promptly notify IEPA of deviations of applicable requirement specified in permit conditions in Section 4.2.2.
 - Permittee required to notify IEPA of any other deviations in Semiannual Monitoring Report.

Work Practice Requirement

- ✓ Monitoring as follows (Condition 4.2.2(d)(ii)(A))
 - Permittee required to conduct inspections of control measures for fugitive PM emission units on at least an annual basis.
- ✓ Recordkeeping as follows (Condition 4.2.2(d)(ii)(B)):
 - Permittee required to keep records of inspections and a maintenance and repair log for the Fugitive PM Emission Units and associated control measures.
 - Permittee required to keep records required by 35 IAC 212.316(g) which includes amount of water or chemical dust suppressant being used to control PM emissions from emission units specified in this section of permit.
- ✓ Reporting as follows (Condition 4.2.5):
 - Permittee required to promptly notify IEPA of deviations of applicable requirement specified in permit conditions in Section 4.2.2.
 - Permittee required to notify IEPA of any other deviations in Semiannual Monitoring Report.

- o Permittee required to submit quarterly report to IEPA as required by 35 IAC 212.316(g) (5)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a recent history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- The source plans to minimize the fugitive PM emissions by good housekeeping practices and the use of wetting agents/dust suppressants on the storage piles when needed.
- The plan provided by the source in the application is deemed to be sufficient to reduce the visible PM emissions at the source. If the moisture content of material is kept up, the PM emissions from handling and storage piles will be greatly reduced. Proper cleaning of paved roadways at the source will eliminate PM emissions resulting from vehicular traffic on these paved surfaces. The PM emissions as a result of vehicular traffic on any unpaved surfaces or storage piles will be reduced by good work practices (e.g., increasing the moisture content of the surfaces during periods of drought and/or reducing vehicle speed at the source).
- Source indicated the feed material is pre-wetted prior to processing giving the material inherent moisture and minimizing PM emissions from occurring during processing.
- Moisture content and PM emissions are also regularly monitored by the source as part of the Fugitive PM Operating Program which is incorporated by reference into the CAAPP Permit.
- These emission units are subject to a more restrictive opacity limit for certain sources in the Chicago area and the source must maintain specific recordkeeping/reporting requirements in 35 IAC 212.316.
- Water truck is only control measure used on the roadways. Annual inspections of the water spray mechanism would be sufficient to ensure water is serving intended purposed of controlling PM emissions from roadways.

Non-Applicability Discussion

Complex non-applicability determinations were not made for this emission unit. All non-applicability discussions can be found in the Draft CAAPP Permit.

Prompt Reporting Discussion

Prompt reporting of deviations has been established as 30 days. See rationale in Chapter III Section 3.9.

3.8 Insignificant Activities Discussion

There are no insignificant activities for the source subject to specific regulations which are obligated to comply with Sections 9.1(d) and Section 39.5 of the Act; Sections 165, 173, and 502 of the Clean Air Act; or any other applicable permit or registration requirements and therefore there are no periodic monitoring requirements that need to be separately addressed.

3.9 Prompt Reporting Discussion

Among other terms and conditions, CAAPP Permits contain reporting obligations to assure compliance with applicable requirements. These reporting obligations are generally four-fold. More specifically, each CAAPP Permit sets forth any reporting requirements specified by state or federal law or regulation, requires prompt reports of deviations from applicable requirements, requires reports of deviations from required monitoring and requires a report certifying the status of compliance with terms and conditions of the CAAPP Permit over the calendar year.

The number and frequency of reporting obligations in any CAAPP Permit is source-specific. That is, the reporting obligations are directly related to factors, including the number and type of emission units and applicable requirements, the complexity of the source and the compliance status. This four-fold approach to reporting is common to virtually all CAAPP Permits as described below. Moreover, this is the approach established in the Draft CAAPP Permit for this source.

Regulatory Reports

Many state and federal environmental regulations establish reporting obligations. These obligations vary from rule-to-rule and thus from CAAPP source to CAAPP source and from CAAPP Permit to CAAPP Permit. The variation is found in the report triggering events, reporting period, reporting frequency and reporting content. Regardless, the CAAPP makes clear that all reports established under applicable regulations shall be carried forward into the CAAPP Permit as stated in Section 39.5(7)(b) of the Illinois Environmental Protection Act. Generally, where sufficiently detailed to meet the exacting standards of the CAAPP, the regulatory reporting requirements are simply restated in the CAAPP Permit. Depending on the regulatory obligations, these regulatory reports may also constitute a deviation report as described below.

The Draft CAAPP Permit for this source would embody all regulatory reporting as promulgated under federal and state regulations under the Clean Air Act and the Illinois Environmental Protection Act. Depending on the frequency of the report, the regulatory report may also satisfy the prompt reporting obligations discussed below. These reports must be certified by a responsible official.

These reports are generally found in the reporting sections for each emission unit group. The various regulatory reporting requirements are summarized in the table at the end of this Reporting Section.

Deviation Reports (Prompt Reporting)

Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require prompt reporting of deviations from the permit requirements.

Neither the CAAPP nor the federal rules upon which the CAAPP is based and was approved by USEPA define the term "prompt". Rather, 40 CFR Part 70.6(a)(3)(iii)(B) intended that the term have flexibility in application. The USEPA has acknowledged for purposes of administrative efficiency and clarity that 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 at a particular source. The Illinois EPA follows this approach and

defines prompt reporting on a permit-by-permit basis. In instances where the underlying applicable requirement contains "prompt" reporting, the Illinois EPA typically incorporates the pre-established timeframe in the CAAPP permit (e.g. a NESHAP or NSPS deviation report). Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA generally uses a timeframe of 30 days to define prompt reporting of deviations.

This approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act as well as 40 CFR Part 70 and the CAA. The reporting arrangement is designed so that the source will appropriately notify the Illinois EPA of those events that might warrant 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 developing preventive measures, to reduce the likelihood of similar events, all of which must be addressed in the notification for the deviation, while at the same time affording regulatory authority and the public timely and relevant information. The approach also affords the Illinois EPA and USEPA an opportunity to direct investigation and follow-up activities, and to make compliance and enforcement decisions in a timely fashion.

The Draft CAAPP Permit for this source would require prompt reporting as required by the Illinois Environmental Protection Act in the fashion described in this subsection. In addition, pursuant to Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act, this Draft CAAPP Permit would also require the source to provide a summary of all deviations with the Semi-Annual Monitoring Report. These reports must be certified by a responsible official, and are generally found in the reporting sections for each emission unit group.

Semi-Annual Monitoring Reports

Section 39.5(7)(f)(i) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a report relative to monitoring obligations as set forth in the permit. Depending upon the monitoring obligation at issue, the semi-annual monitoring report may also constitute a deviation report as previously discussed. This monitoring at issue includes instrumental and non-instrumental emissions monitoring, emissions analyses, and emissions testing established by state or federal laws or regulations or as established in the CAAPP Permit. This monitoring also includes recordkeeping. Each deviation from each monitoring requirement must be identified in the relevant semi-annual report. These reports provide a timely opportunity to assess for compliance patterns of concern. The semi-annual reports shall be submitted regardless of any deviation events. Reporting periods for semi-annual monitoring reports are January 1 through June 30 and July 1 through December 31 of each calendar year. Each semi-annual report is due within 30 days after the close of reporting period. The reports shall be certified by a responsible official. The Draft CAAPP Permit for this source would require such reports at Condition 3.5(b).

Annual Compliance Certifications

Section 39.5(7)(p)(v) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a source to submit a certification of its compliance status with each term and condition of its CAAPP Permit. The reports afford a broad assessment of a CAAPP sources compliance status. The CAAPP requires that this report be submitted, regardless of compliance status,

on an annual basis. Each CAAPP Permit requires this annual certification be submitted by May 1 of the year immediately following the calendar year reporting period. The report shall be certified by a responsible official. The Draft CAAPP Permit for this source would require such a report at Condition 2.6(a).

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 source to measure compliance and to direct investigation and follow-up activities. Prompt reporting is evidence of the source'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 Draft 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 a deviation from an emission limitation or standard or the like, as necessary and appropriate.

As a result, the Illinois EPA's approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection 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.

3.10 Greenhouse Gas Provisions

On June 3, 2010, USEPA adopted rules for the initial permitting of major sources of emissions of greenhouse gases (GHG). See, 75 FR 31514-31608. Prompted by the earlier adoption of GHG emissions standards for motor vehicles under Title II of the CAA, the USEPA's rules implement a two-phased program for permitting major sources of GHG under Title V permit programs.³ As Illinois EPA is planning to issue a permit to this source during the second phase of the rules, GHG emissions must be addressed during this CAAPP permitting action.⁴ Annual Emission Reports submitted to the Illinois EPA by this source and/or estimated GHG emissions by the Illinois EPA, which detail the source's actual annual emissions of GHG, provide the necessary data to appropriately address emissions of GHG in the Draft CAAPP Permit. The data in these reports clearly show the source is a major source for emissions of GHG.

The new federal rules also require subject Title V sources to comply with any applicable GHG-related requirements that arise from other CAA programs.⁵ However, there are currently no emission standards or other regulatory obligations relating to GHG that constitute "applicable requirements" for this source. For this reason, the Draft CAAPP Permit for this source does not contain any substantive requirements for GHG. At the federal level, the only

venue that could potentially establish GHG-related requirements at this time is the PSD program. As of January 2, 2011, sources triggering PSD must evaluate GHG emissions resulting from projects that trigger the major source or major modification rules.⁶ This source has neither constructed such a project, nor received a permit authorizing such a project, since January 2, 2011, to the present, and therefore has not triggered any GHG-related requirements under the PSD program.

There are no other GHG-related requirements established under the CAA that are applicable to this source at this time. In particular, the mandatory reporting rule for GHG promulgated by USEPA in 2009 [see generally, 40 CFR Part 98] is not an applicable requirement and therefore would not be included in the Draft CAAPP Permit for this source. There are also no GHG-related requirements under the Illinois Environmental Protection Act or contained within Illinois' SIP that apply to the source at this time. Other state laws or regulations in Illinois relating to GHG, including efforts to reduce emissions of GHG under authority other than the Illinois Environmental Protection Act, do not constitute applicable requirements under the CAAPP.

3.11 Incorporation by Reference Discussion

Based on guidance found in White Paper 2 and past petition responses by the Administrator, it is recognized that Title V permit authorities may, within their discretion, incorporate plans by reference. As recognized in the *White Paper 2*, permit authorities can effectively streamline the contents of a Title V permit, avoiding the inevitable clutter of restated text and preventing unnecessary delays where, as here, permit issuance is subject to a decision deadline.⁷ However, it is also recognized that the benefits of incorporation of plans must be carefully balanced by a permit authority with its duty to issue permits in a way that is "clear and meaningful" to the Permittee and the public.⁸

The criteria that are mentioned in USEPA Administrator Petition Responses stress the importance of identifying, *with specificity*, the object of the incorporation.⁹ The Illinois EPA agrees that such emphasis is generally consistent with USEPA's pronouncements in previous guidance.

For each condition incorporating a plan, the Illinois EPA is also briefly describing the general manner in which the plan applies to the source. Identifying the nature of the source activity, the regulatory requirements or the nature of the equipment associated with the plan is a recommendation of the *White Paper 2*¹⁰. The Illinois EPA has stopped short of enumerating the actual contents of a plan, as restating them in the permit would plainly defeat the purpose of incorporating the document by reference and be contrary to USEPA guidance on the subject.¹¹

Plans may need to be revised from time to time, as occasionally required by circumstance or by underlying rule or permit requirement. Except where expressly precluded by the relevant rules, this Draft CAAPP Permit allows the Permittee to make future changes to a plan without undergoing formal permit revision procedures. This approach will allow flexibility to make required changes to a plan without separately applying for a revised permit and, similarly, will lessen the impacts that could result for the Illinois EPA if every change to a plan's contents required a permitting transaction.¹² Changes to the incorporated plans during the permit term are automatically incorporated into the Draft CAAPP Permit unless the Illinois EPA expresses a written

objection. The exception to this practice is the PM₁₀ Contingency Measure Plan, for which a permit revision is needed for any changes to the plan.¹³

The Draft CAAPP Permit incorporates by reference the following plans: Fugitive Particulate Matter Operating Program, PM₁₀ Contingency Plan, and/or Episode Action Plan.¹⁴

3.12 Periodic Monitoring General Discussions

Pursuant to Section 504(c) of the Clean Air Act, a Title V permit must set forth monitoring requirements, commonly referred to as "Periodic Monitoring," to assure compliance with the terms and conditions of the permit. A general discussion of Periodic Monitoring is provided below. The Periodic Monitoring that is proposed for specific operations and emission units and at this source is discussed in Chapter III of this Statement of Basis. Chapter III provides a narrative discussion of and justification for the elements of Periodic Monitoring that would apply to the different emission units and types of emission units at the facility.

As a general matter, the required content of a CAAPP Permit with respect to such Periodic Monitoring is addressed in Section 39.5(7) of the Illinois Environmental Protection Act.¹⁵ Section 39.5(7)(b) of the Illinois Environmental Protection Act¹⁶ provides that in a CAAPP Permit:

The Agency shall include among such conditions applicable monitoring, reporting, record keeping and compliance certification requirements, as authorized by paragraphs d, e, and f of this subsection, that the Agency deems necessary to assure compliance with the Clean Air Act, the regulations promulgated thereunder, this Act, and applicable Board regulations. When monitoring, reporting, record keeping and compliance certification requirements are specified within the Clean Air Act, regulations promulgated thereunder, this Act, or applicable regulations, such requirements shall be included within the CAAPP Permit.

Section 39.5(7)(d)(ii) of the Illinois Environmental Protection Act further provides that a CAAPP Permit shall:

Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), require Periodic Monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit

...

Accordingly, the scope of the Periodic Monitoring that must be included in a CAAPP Permit is not restricted to monitoring requirements that were adopted through rulemaking or imposed through permitting. When applicable regulatory emission standards and control requirements or limits and control requirement in relevant Title 1 permits are not accompanied by compliance procedures, it is necessary for Monitoring for these standards, requirements or limits to be established in a CAAPP Permit.^{17, 18} Monitoring requirements must also be established when standards and control requirement are accompanied by compliance procedures but those procedures are not adequate to assure compliance with the applicable standards or requirements.^{19, 20} For this purpose, the requirements for Periodic Monitoring in a CAAPP Permit may include requirements for emission testing, emissions monitoring, operational monitoring, non-instrumental monitoring, and recordkeeping for each emission

unit or group of similar units at a facility, as required by rule or permit, as appropriate or as needed to assure compliance with the applicable substantive requirements. Various combinations of monitoring measures will be appropriate for different emission units depending on their circumstances, including the substantive emission standards, limitations and control requirements to which they are subject.

What constitutes sufficient Periodic Monitoring for particular emission units, including the timing or frequency associated with such Monitoring requirements, must be determined by the permitting authority based on its knowledge, experience and judgment.²¹ For example, as Periodic Monitoring must collect representative data, the timing of Monitoring requirements need not match the averaging time or compliance period of the associated substantive requirements, as set by the relevant regulations and permit provisions. The timing of the various requirements making up the Periodic Monitoring for an emission unit is something that must be considered when those Monitoring requirements are being established. For this purpose, Periodic Monitoring often consists of requirements that apply on a regular basis, such as routine recordkeeping for the operation of control devices or the implementation of the control practices for an emission unit. For certain units, this regular monitoring may entail "continuous" monitoring of emissions, opacity or key operating parameters of a process or its associated control equipment, with direct measurement and automatic recording of the selected parameter(s). As it is infeasible or impractical to require emissions monitoring for most emission units, instrumental monitoring is more commonly conducted for the operating parameters of an emission unit or its associated control equipment. Monitoring for operating parameter(s) serves to confirm proper operation of equipment, consistent with operation to comply with applicable emission standards and limits. In certain cases, an applicable rule may directly specify that a particular level of an operating parameter be maintained, consistent with the manner in which a unit was being operated during emission testing. Periodic Monitoring may also consist of requirements that apply on a periodic basis, such as inspections to verify the proper functioning of an emission unit and its associated controls.

The Periodic Monitoring for an emission unit may also include measures, such as emission testing, that would only be required once or only upon specific request by the Illinois EPA. These requirements would always be accompanied by Monitoring requirements would apply on a regular basis. When emission testing or other measure is only required upon request by the Illinois EPA, it is included as part of the Periodic Monitoring for an emission unit to facilitate a response by the Illinois EPA to circumstances that were not contemplated when Monitoring was being established, such as the handling of a new material or a new mode of operation. Such Monitoring would also serve to provide further verification of compliance, along with other potentially useful information. As emission testing provides a quantitative determination of compliance, it would also provide a determination of the margin of compliance with the applicable limit(s) and serve to confirm that the Monitoring required for an emission unit on a regular basis is reliable and appropriate. Such testing might also identify specific values of operating parameters of a unit or its associated control equipment that accompany compliance and can be relied upon as part of regular Monitoring.

There are a number of considerations or factors that are or may be relevant when evaluating the need to establish new monitoring requirements as part of the Periodic Monitoring for an emission unit. These factors include: (1) The nature of the emission unit or process and its emissions; (2) The variability

in the operation and the emissions of the unit or process over time; (3) The use of add-on air pollution control equipment or other practices to control emissions and comply with the applicable substantive requirement(s); (4) The nature of that control equipment or those control practices and the potential for variability in their effectiveness; (5) The nature of the applicable substantive requirement(s) for which Periodic Monitoring is needed; (6) The nature of the compliance procedures that specifically accompany the applicable requirements; (7) The type of data that would already be available for the unit; (8) The effort needed to comply with the applicable requirements and the expected margin of compliance; (9) The likelihood of a violation of applicable requirements; (10) The nature of the Periodic Monitoring that may be readily implemented for the emission unit; (11) The extent to which such Periodic Monitoring would directly address the applicable requirements; (12) The nature of Periodic Monitoring commonly required for similar emission units at other facilities and in similar circumstances; (13) The interaction or relationship between the different measures in the Periodic Monitoring for an emission unit; and (14) The feasibility and reasonableness of requiring additional measures in the Periodic Monitoring for an emission unit in light of other relevant considerations.²²

CHAPTER IV – CHANGES FROM PREVIOUSLY ISSUED CAAPP PERMITS

4.1 Major Changes Summary

This renewal CAAPP draft is presented in a new format. The new format is the result of recommendations by the USEPA, comments made by sources, and interactions with the public.

	<i>Previous CAAPP Permit Layout</i>	<i>New CAAPP Permit Layout</i>
Section 1	Source Identification	Source Information
Section 2	List Of Abbreviations/Acronyms	General Permit Requirements
Section 3	Insignificant Activities	Source Requirements
Section 4	Significant Emission Units	Emission Unit Requirements
Section 5	Overall Source Conditions	Title I Requirements
Section 6	Emission Control Programs	Insignificant Activities
Section 7	Unit Specific Conditions	Other Requirements
Section 8	General Permit Conditions	State Only Requirements
Section 9	Standard Permit Conditions	---
Section 10	Attachments	Attachments

4.2 Specific Permit Condition Changes

As an initial permit, there are not changes from a previously issued CAAPP Permit.

Endnotes

¹ The federal PSD program, 40 CFR 52.21, applies in Illinois. The Illinois EPA administers PSD permitting for major projects in Illinois pursuant to a delegation agreement with USEPA.

² Illinois has a state nonattainment NSR program, pursuant to state rules, Major Stationary Sources Construction and Modification ("MSSCM"), 35 IAC Part 203, which have been approved by USEPA as part of the State Implementation Plan for Illinois.

³ The new rules apply the first phase of permitting to sources already subject to Title V by virtue of their conventional, non-GHG pollutants. As noted above, these sources are expected to address GHG in their permitting applications and to comply with any substantive requirements for GHG that have been established through other CAA programs such as PSD. The second phase of permitting that begins July 1, 2011, essentially applies the same requirements to sources who will become subject to Title V based on their GHG emissions alone (i.e., existing or newly constructed sources with a potential to emit of equal to or greater than 100,000 tons per year of CO₂e and 100 tons per year of GHG on a mass basis).

⁴ USEPA has stated that the first phase of its new rules requires existing Title V sources to address GHG in their Title V applications by citing to any pollutants for which the Title V source is major and to all regulated air pollutants. See, PSD and Title V Permitting Guidance for Greenhouse Gases, prepared by the Office of Air Quality Planning and Standards, page 51 (November 2010).

⁵ See generally, PSD and Title V Permitting Guidance for GHG at pages 53-56.

⁶ A major source subject to PSD based on potential emissions of a non-GHG pollutant and potential emissions of GHG equal or greater than 75,000 tons per year of CO₂e is required to address GHG emissions in evaluating control options and associated monitoring, reporting, etc, for any construction of a new major source or a major modification of an existing major source.

⁷ Among other things, USEPA observed that the stream-lining benefits can consist of "reduced cost and administrative complexity, and continued compliance flexibility...". *White Paper 2*, page 41.

⁸ See, *In the Matter of Tesoro Refining and Marketing*, Petition No. IX-2004-6, Order Denying in Part and Granting in Part Petition for Objection to Permit, at page 8 (March 15, 2005); see also, *White Paper 2* at page 39 ("reference must be detailed enough that the manner in which any referenced materials applies to a facility is clear and is not reasonably subject to misinterpretation").

⁹ The Order provides that permit authorities must ensure the following: "(1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of the document is being referenced; and (3) citations, cross references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to

misinterpretation." See, Petition Response at page 43, citing White Paper 2 at page 37.

¹⁰ See, White Paper 2 at page 39.

¹¹ Nothing in USEPA guidance, including the White Paper 2 or previous orders responding to public petitions, supports the notion that permit authorities incorporating a document by reference must also restate contents of a given plan in the body of the Title V permit. Such an interpretation contradicts USEPA recognition that permit authorities need not restate or recite an incorporated document so long as the document is sufficiently described. White Paper 2 at page 39; see also, In the matter of Consolidated Edison Co. of New York, Inc., 74th St. Station, Petition No. II-2001-02, Order Granting in Part and Denying in Part Petition for Objection to Permit at page 16 (February 19, 2003).

¹² This approach is consistent with USEPA guidance, which has previously embraced a similar approach to certain SSM plans. See, Letter and Enclosures, dated May 20, 1999, from John Seitz, Director of Office of Air Quality Planning and Standards, to Robert Hodanbosi and Charles Lagges, STAPPA/ALAPCO, pages 9-10 of Enclosure B.

¹³ The PM₁₀ Contingency Measure Plan is not being provided the same flexibility with respect to revising the plan's contents, as the underlying SIP rule treats the contents of the plan as federally enforceable. Any future revisions to this plan during the permit term are required to undergo procedures for permit modification. See, Condition 5.3.3(d).

¹⁴ Each incorporated plan addressed by this Section of the Statement of Basis is part of the source's permit file. As such, these plans are available to any person interested in viewing the contents of a given plan may do so at the public repository during the comment period or, alternatively, may request a copy of the same from the Illinois EPA under the Freedom of Information Act. See also 71 FR 20447.

¹⁵ The provisions of the Act for Periodic Monitoring in CAAPP permits reflect parallel requirements in the federal guidelines for State Operating Permit Programs, 40 CFR 70.6(a)(3)(i)(A), (a)(3)(i)(B), and (c)(1).

¹⁶ Section 39.5(7)(p)(i) of the Act also provides that a CAAPP permit shall contain "Compliance certification, testing, monitoring, reporting and record keeping requirements sufficient to assure compliance with the terms and conditions of the permit."

¹⁷ The classic example of regulatory standards for which Periodic Monitoring requirements must be established in a CAAPP permit are state emission standards that pre-date the 1990 Clean Air Act Amendments that were adopted without any associated compliance procedures. Periodic Monitoring must also be established in a CAAPP permit when standards and limits are accompanied by compliance procedures but those procedures are determined to be inadequate to assure compliance with the applicable standards or limits.

¹⁸ Another example of emission standards for which requirements must be established as part of Periodic Monitoring is certain NSPS standards that require initial performance testing but do not require periodic testing or

other measures to address compliance with the applicable limits on a continuing basis.

¹⁹ The need to establish Monitoring requirements as part of Periodic Monitoring when existing compliance procedures are determined to be inadequate, as well as when they are absent, was confirmed by the federal appeals court in *Sierra Club v. Environmental Protection Agency*, 536 F.3d 673, 383 U.S. App. D.C. 109.

²⁰ The need to establish Monitoring requirements as part of Periodic Monitoring is also confirmed in USEPA's Petition Response. USEPA explains that "...if there is periodic monitoring in the applicable requirements, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance." Petition Response, page 6.

²¹ The test for the adequacy of "Periodic Monitoring" is a context-specific determination, particularly whether the provisions in a Title V permit reasonably address compliance with relevant substantive permit conditions. 40 CFR 70.6(c)(1); see also 40 CFR 70.6(a)(3)(i)(B); see also, *In the Matter of CITGO Refinery and Chemicals Company L.P.*, Petition VI-2007-01 (May 28, 2009); see also, *In the Matter of Waste Management of LA. L.L.C. Woodside Sanitary Landfill & Recycling Center, Walker, Livingston Parish, Louisiana*, Petition VI-2009-01 (May 27, 2010); see also, *In the Matter of Wisconsin Public Service Corporation's JP Pulliam Power Plant*, Petition V-2009-01 (June 28, 2010).

²² A number of these factors are specifically listed by USEPA in its Petition Response. USEPA also observes that the specific factors that it identifies in its Petition Response with respect to Periodic Monitoring provide "...the permitting authority with a starting point for its analysis of the adequacy of the monitoring; the permitting authority also may consider other site-specific factors." Petition Response, page 7.