217-785-1705

REOPENING FOR CAUSE
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090009
I.D. No.: 135803AAA
Date Received: September 01, 1995
Operation of: Coffeen Power Station
Date Issued: September 29, 2005
Effective Date: September 20, 2012
Expiration Date[1]: September 20 2017
Source Location: 134 CIPS Lane, Coffeen, Montgomery County
Responsible Official: Randy O'Keefe, Managing Director Plant Operations, Coffeen Power Station

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit did not become effective until September 20, 2012.

Permit Action: Reopening for Cause
Date Issued: TBD
Effective Date: TBD

In accordance with Section 39.5(15)(a)(i) of the Illinois Environmental Protection Act, this permit action addresses all new Clean Air Act (CAA) requirements that have become applicable to the source since September 29, 2005. Affected permit conditions largely reflect the addition of new or revised text to the permit; however, some conditions will also reflect deleted text that has been displaced or made obsolete by newly applicable requirements.

Please note that this cover letter encompasses only permit revision(s) to the attached CAAPP permit from the above-referenced permit reopening, as described in the accompanying Statement of Basis. Other permit revision(s) occurring in parallel with this permit action, while also appearing in the attached permit, are authorized by a different origin of authority and are therefore addressed by separate cover letters. Applicable procedures used in this permit action were the same as for initial permit issuance, 415 ILCS 5/39.5(15)(c).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MTR:MWG:psj

cc: Illinois EPA, FOS, Region 2
USEPA

1 Except as addressed in Condition 8.7 of this permit.

217/785-1705

SIGNIFICANT MODIFICATION
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090009
I.D. No.: 135803AAA
Date Received: September 01, 1995
Operation of: Coffeen Power Station
Date Issued: September 29, 2005
Effective Date: September 20, 2012
Expiration Date[2]: September 20 2017
Source Location: 134 CIPS Lane, Coffeen, Montgomery County
Responsible Official: Randy O'Keefe, Managing Director Plant Operations, Coffeen Power Station

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit did not become effective until September 20, 2012.

Permit Action: Significant Modification
Date Issued: TBD
Effective Date: TBD

In accordance with Section 39.5(14)(c) of the Illinois Environmental Protection Act, this permit action addresses all revisions through the procedures for significant modification to the CAAPP permit. Affected permit conditions reflect a variety of changes, including, among other things, significant changes in existing monitoring permit terms or conditions, or relaxation of reporting or recordkeeping requirements.

Please note that this cover letter encompasses only permit revision(s) to the attached CAAPP permit from the above-referenced significant modification, as described in the accompanying Statement of Basis. Other permit revision(s) occurring in parallel with this permit action, while also appearing in the attached permit, are authorized by a different origin of authority and are therefore addressed by separate cover letters. Applicable procedures used in this permit action were in accordance with 415 ILCS 5/39.5(c)(iii).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MTR:MWG:psj

cc: Illinois EPA, FOS, Region 2
USEPA

2 Except as addressed in Condition 8.7 of this permit.

217/785-1705

MINOR MODIFICATION
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090009
I.D. No.: 135803AAA
Date Received: September 01, 1995
Operation of: Coffeen Power Station
Date Issued: September 29, 2005
Effective Date: September 20, 2012
Expiration Date[3]: September 20 2017
Source Location: 134 CIPS Lane, Coffeen, Montgomery County
Responsible Official: Randy O'Keefe, Managing Director Plant Operations, Coffeen Power Station

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit did not become effective until September 20, 2012.

Permit Action: Minor Modification
Date Issued: TBD
Effective Date: TBD

In accordance with Section 39.5(14)(a)(i) of the Illinois Environmental Protection Act, this permit action addresses all revisions through the procedures for minor modification to the CAAPP permit. Affected permit conditions reflect a variety of changes, including, among other things, those that do not cause significant changes to existing monitoring, reporting or recordkeeping.

Please note that this cover letter encompasses only permit revision(s) to the attached CAAPP permit from the above-referenced minor modification, as described in the accompanying Statement of Basis. Other permit revision(s) occurring in parallel with this permit action, while also appearing in the attached permit, are authorized by a different origin of authority and are therefore addressed by separate cover letters. Applicable procedures used in this permit action were in accordance with 415 ILCS 5/39.5(a)(iii).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MTR:MWG:psj

cc: Illinois EPA, FOS, Region 2
USEPA

3 Except as addressed in Condition 8.7 of this permit.

217/785-1705

ADMINISTRATIVE AMENDMENT
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Application No.: 95090009
I.D. No.: 135803AAA
Date Received: September 01, 1995
Operation of: Coffeen Power Station
Date Issued: September 29, 2005
Effective Date: September 20, 2012
Expiration Date[4]: September 20 2017
Source Location: 134 CIPS Lane, Coffeen, Montgomery County
Responsible Official: Randy O'Keefe, Managing Director Plant Operations, Coffeen Power Station

The above-referenced permit was originally issued to the Permittee to OPERATE an electrical power generation station, pursuant to the corresponding permit application, on September 29, 2005. As a result of an automatic stay of the permit during the pendency of an administrative permit appeal, the CAAPP permit did not become effective until September 20, 2012.

Permit Action: Administrative Amendment
Date Issued: TBD
Effective Date: TBD

In accordance with Section 39.5(13)(c) of the Illinois Environmental Protection Act, this permit action addresses all revisions through the procedures for administrative amendment to the CAAPP permit. The changes that are being addressed through these administrative amendment procedures involve typographical corrections, minor administrative changes and/or more frequent monitoring or reporting, as authorized by Section 39.5(13)(c)(i), (ii) and (iii) of the Act, respectively.

Please note that this cover letter encompasses only permit revision(s) to the attached CAAPP permit from the above-referenced permit administrative amendment, as described in the accompanying Statement of Basis. Other permit revision(s) occurring in parallel with this permit action, while also appearing in the attached permit, are authorized by a different origin of authority and are therefore addressed by separate cover letters.

In addition, the current Acid Rain Permit is incorporated into this CAAPP permit in accordance with 415 ILCS 5/39.5(d). (See Attachment 10.5).

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

REP:MWG:psj

cc: Illinois EPA, FOS, Region 2
USEPA

4 Except as addressed in Condition 8.7 of this permit.

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# 1.0 INTRODUCTION

## 1.1 Identification

Illinois Power Generating Company - Coffeen Power Station
134 CIPS Lane
Post Office Box 306
Coffeen, Illinois 62017
217/534-2363

I.D. No.: 135803AAA
Acid Rain Permit ORIS Code No.: 861

Standard Industrial Classification: 4911, Electrical Services

## 1.2 Owner/Parent Company

Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

## 1.3 Operator

Illinois Power Generating Company
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Rick Diericx
618/343-7761

## 1.4 General Source Description

The Coffeen Power Station operates two coal-fired boilers to generate electrical power.

## 1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1", if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

## 2.0 LIST OF ABBREVIATIONS AND ACRONYMS USED IN THIS PERMIT

| | |
|---|---|
| Acfm | Actual Cubic Feet Per Minute |
| ACI | Activated Carbon Injection |
| ACMA | Alternative Compliance Market Account |
| Act | Illinois Environmental Protection Act [415 ILCS 5/1 et seq.] |
| AP-42 | Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711 |
| BART | Best Available Retrofit Technology |
| Btu | British thermal unit |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] |
| CAAPP | Clean Air Act Permit Program |
| CAIR | Clean Air Interstate Rule |
| CAM | Compliance Assurance Monitoring |
| CEMS | Continuous Emission Monitoring System |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| CSAPR | Cross State Air Pollution Rule |
| dcfm | dry cubic feet per minute |
| DSI | Dry Sorbent Injection |
| EGU | electrical generating unit(s) |
| ESP | Electrostatic Precipitator |
| °F | degrees Fahrenheit |
| FGC | Flue Gas Conditioning |
| FGD | Flue Gas Desulfurization |
| ft | foot |
| $ft^3$ | cubic foot |
| GWh | Gigawatt hour (1.0E+3 MWh) |
| Gal | Gallon |
| HAP | Hazardous Air Pollutant |
| HP | horsepower |
| hr | Hour |
| IAC | Illinois Administrative Code |
| I.D. No. | Identification Number of Source, assigned by Illinois EPA |
| ILCS | Illinois Compiled Statutes |
| Illinois EPA | Illinois Environmental Protection Agency |
| °K | degrees Kelvin |
| Kg | kilogram |
| Kw | Kilowatts |
| LAER | Lowest Achievable Emission Rate |
| Lb | Pound |
| LNB | Low $NO_x$ Burners |
| m | meter |
| MACT | Maximum Achievable Control Technology |
| MATS | Mercury and Air Toxics Standard |
| mmBtu | Million British thermal units |
| MW | Megawatts |
| MWh | Megawatt hour |
| MRRS | Mercury Re-emission Reduction System |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |

| | |
|---|---|
| $NO_x$ | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| NSSA | new source set-aside |
| ORIS | Office of Regulatory Information System |
| OFA | Over-Fire Air |
| OM | organic material |
| PM | Particulate Matter |
| $PM_{10}$ | Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods |
| $PM_{2.5}$ | Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods |
| ppm | parts per million |
| PSD | Prevention of Significant Deterioration (40 CFR 52.21) |
| psia | pounds per square inch absolute |
| RMP | Risk Management Plan |
| $SO_2$ | Sulfur Dioxide |
| SCR | Selective Catalytic Reduction |
| STMS | Sorbent Trap Monitoring System(s) |
| T | ton (2000 pounds) |
| TBtu | 1.0E+12 British thermal units |
| TR | Transport Rule |
| T1 | Title I – identifies Title I conditions that have been carried over from an existing permit |
| T1N | Title I New – identifies Title I conditions that are being established in this permit |
| T1R | Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit |
| USEPA | United States Environmental Protection Agency |
| VOC or VOM | volatile organic compounds or volatile organic material |
| VOL | volatile organic liquid |
| WFGD | Wet Flue Gas Desulfurization system |
| yr | year |

# 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

## 3.1 Identification of Insignificant Activities

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

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

Glycol Storage Tanks
Cooling Towers

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

Lime/Soda Ash Storage Silo
ACI Silo

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

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

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

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

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

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

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats,

sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b):

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is considered an insignificant activity under 35 IAC 201.210(b)(29) and is generally not addressed by the unit-specific conditions of this permit for coal fired boilers. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from each coal fired boiler is at all times subject to the applicable opacity standard and the unit-specific conditions of this permit for boilers that relate to opacity are applicable during maintenance and repair of a boiler.

## 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.

3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

## 3.3 Addition of Insignificant Activities

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

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) or 201.211, other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

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

## 4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| Emission Unit | Description | Emission Control Equipment | Ref.* |
|---|---|---|---|
| Boiler 1 (CB-1) | Babcock & Wilcox Boiler | OFA, SCR, ESP, WFGD and MRRS | 7.1 |
| Boiler 2 (CB-2) | Babcock & Wilcox Boiler | OFA, SCR, ESP, WFGD and MRRS | |
| Coal Handling Equipment | Coal Receiving, Transfer and Storage Operations | Enclosures, Covers, and Dust Suppressant Application, and Bin Vents | 7.2 |
| Coal Processing Equipment | Coal Crushing Operation | Enclosures, Covers and Dust Suppressant Application System | 7.3 |
| Fly Ash Handling Equipment | Transfer System, Silo, and Loadout Operation | Enclosures, Covers, and Bin Vents | 7.4 |
| Limestone and Gypsum Handling Equipment | Limestone Day Bins, Wet Ball Mills and Limestone Conveyors | Enclosures, Covers and Dust Suppressant Application System | 7.5 |
| Auxiliary Boiler | Auxiliary Boiler | None | 7.6 |
| WFGD Emergency Diesel Generator | WFGD Emergency Diesel Generator | None | 7.7 |
| Gasoline Storage Tank | Gasoline Storage Tank with Submerged Loading Pipe | None | 7.8 |

* Reference to the Unit Specific Conditions in Section 7 of this permit.

Note: The information and descriptions contained in this table are for informational purposes only and imply no limits or constraints.

# 5.0 OVERALL SOURCE CONDITIONS

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

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of $SO_2$, CO, $NO_x$, VOM, HAP, and PM emissions.

5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.

5.1.3 The source is considered a single source with CyClean Coal Additive Facility, I.D. No.135803AAC, located at 134 CIPS Lane, Coffeen, IL.

## 5.2 Applicable Regulations

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

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability. Appropriate compliance procedures addressing these regulations are set forth for specific emission units in Section 7 of this permit:

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan (RMP)

a. This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the federal regulations for Chemical Accident Prevention. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(1).

b. The Permittee shall revise and update the RMP submitted pursuant to 40 CFR 68.150, as specified in 40 CFR 68.190.

5.2.5 Future Emission Standards

a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

   Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15)(a) of the act. (See Condition 9.12.2.)

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

5.2.6 Episode Action Plan

a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the Illinois EPA an approved Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.

b. Pursuant to 415 ILCS 5/39.5(7)(a), the Episode Action Plan, as submitted by the Permittee on July 28, 2014, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce $SO_2$, $PM_{10}$, $NO_2$, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.

d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved Episode Action Plan upon receiving notice from the Illinois EPA.

e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.

f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.

g. Pursuant to Section 39.5(7)(b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

5.2.7 Control Measures Record

a. The Control Measures Record, as submitted by the Permittee on December 12, 2013, is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.2.9(b), 7.3.9(b) and 7.4.9(b). Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.

b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.2.9, 7.3.9 and 7.4.9).

## 5.3 Source-Wide Emission Limitations

### 5.3.1 Permitted Emissions for Fees

The annual emissions from the source for purposes of "Duties to Pay Fees" of Condition 9.4, not considering insignificant activities as addressed by Section 3, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units on a calendar year basis. The Permittee shall maintain records with supporting calculations of how the annual

emissions for fee purposes were calculated. This Condition is set for the purpose of establishing fees and is not federally enforceable. See Section 39.5(18) of the Act.

| *Pollutant* | | *Tons/Year* |
|---|---|---|
| Volatile Organic Material | (VOM) | 307 |
| Sulfur Dioxide | ($SO_2$) | 660 |
| Particulate Matter | (PM) | 890 |
| Nitrogen Oxides | ($NO_x$) | 2,525 |
| HAP, not included in VOM or PM | (HAP) | 60 |
| | Total | 4,442 |

## 5.4 General Recordkeeping Requirements

### 5.4.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134.

### 5.4.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b), (e)(ii), (o)(v), and (p)(ii)(A) and (B) of the Act.

a. All records required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be readily accessible to the Permittee, the Illinois EPA and USEPA, and made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. In response to an Illinois EPA or USEPA request made during the course of an inspection of the source, the Permittee shall retrieve and provide paper copies, or as electronic media, any records required by this permit that are retained in an electronic format (e.g., computer). Such response shall be provided at the time of the inspection; however, if the Permittee believes that the volume and nature of the requested material would make this overly burdensome, material shall be provided no later than 10 days thereafter unless a later date is agreed upon by the Permittee, Illinois EPA, and/or the USEPA.

c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

## 5.5 General Reporting Requirements

### 5.5.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.

b. i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.

   ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

### 5.5.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, as specified by 35 IAC Part 254 [Sections 39.5(7)(a), (b) and (f) of the Act].

# 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

## 6.1 Acid Rain Program

### 6.1.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Boilers 1 (CB-1) and 2 (CB-2)

Note: Title IV of the CAA and regulations promulgated thereunder establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

### 6.1.2 Applicable Emission Requirements

The Permittee shall not violate applicable Title IV provisions. In particular, $NO_x$ emissions of affected units shall not exceed the limit set by 40 CFR Part 76, with the ability for averaging among units as allowed by an Acid Rain Permit. $SO_2$ emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(l) of the Act].

Note: Affected sources must hold $SO_2$ allowances to account for the $SO_2$ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of $SO_2$ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

### 6.1.3 Monitoring, Recordkeeping and Reporting

The Permittee shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Sections 39.5(7)(b) and 39.5(17)(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

$NO_x$: Continuous Emissions Monitoring (40 CFR 75.12)
$SO_2$: Continuous Emissions Monitoring (40 CFR 75.11)
Opacity: Continuous Emission Monitoring (40 CFR 75.14)

### 6.1.4 Acid Rain Permit

The Permittee shall comply with the terms and conditions of the source’s Acid Rain permit [Section 39.5(17)(l) of the Act].

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act.

Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 5 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.1.5 Coordination with Other Requirements

a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions. (Section 39.5(17)(h) of the Act). In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(13)(e) of the Act].

b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the Permittee shall comply with both requirements [Section 39.5(7)(h) of the Act].

## 6.2 Cross-State Air Pollution Rule (CSAPR)/Transport Rule (TR) Trading Programs

### 6.2.1 Applicability

The USEPA issued the Cross State Air Pollution Rule (CSAPR)*, also known as the Transport Rule (TR) in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). This source is an affected source, and the following emission units at the source are affected units for the TR $NO_x$ Annual Trading Program, the TR $NO_x$ Ozone Season Trading Program, and the TR $SO_2$ Group 1 Trading Program:

Coffeen Boiler CB-1
Coffeen Boiler CB-2

* Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

### 6.2.2 Applicable Emission Requirements

a. TR $NO_x$ Annual Emissions Requirements

i. Pursuant to 40 CFR 97.406(c)(1), beginning January 1, 2015,

A. As of the allowance transfer deadline for a control period in a given year, the Permittee shall hold, in the source's compliance account, TR $NO_x$ Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total $NO_x$ emissions for such control period from the affected units.

B. If total $NO_x$ emissions during a control period in a given year from the TR $NO_x$ Annual units at a TR $NO_x$ Annual source are in excess of the TR $NO_x$ Annual emissions limitation set forth in paragraph (a)(i)(A) above, then:

I. The Permittee and each TR $NO_x$ Annual unit at the source shall hold the TR $NO_x$ Annual allowances required for deduction under 40 CFR 97.424(d); and

II. The Permittee and each TR $NO_x$ Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate

violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.

ii. Beginning January 1, 2017, if total $NO_x$ emissions during a control period in a given year from all TR $NO_x$ Annual units at TR $NO_x$ Annual sources in Illinois exceed the Illinois assurance level, the Permittee shall comply with the provisions of 40 CFR 97.406(c)(2).

iii. Compliance periods.

A. A TR $NO_x$ Annual unit shall be subject to the requirements under Condition 6.2.2(a)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c)(3)(i)].

B. A TR $NO_x$ Annual unit shall be subject to the requirements under Condition 6.2.2(a)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c)(3)(ii)].

iv. Vintage of allowances held for compliance.

A. A TR $NO_x$ Annual allowance held for compliance with the requirements under Condition 6.2.2(a)(i)(A) for a control period in a given year must be a TR $NO_x$ Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c)(4)(i)].

B. A TR $NO_x$ Annual allowance held for compliance with the requirements under Conditions 6.2.2(a)(i)(B) or 6.2.2(a)(ii) for a control period in a given year must be a TR $NO_x$ Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.406(c)(4)(ii)].

v. Allowance Management System requirements. Each TR $NO_x$ Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA [40 CFR 97.406(c)(5)].

vi. Limited authorization. A TR $NO_x$ Annual allowance is a limited authorization to emit one ton of $NO_x$ during the control period in one year. Such authorization is limited in its use and duration as follows:

A. Such authorization shall only be used in accordance with the TR $NO_x$ Annual Trading Program [40 CFR 97.406(c)(6)].

b. TR $NO_x$ Ozone Season Emissions Requirements

i. Pursuant to 40 CFR 97.506(c)(1), beginning May 1, 2015,

A. As of the allowance transfer deadline for a control period in a given year, the Permittee shall hold, in the source's compliance account, TR $NO_x$ Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total $NO_x$ emissions for such control period from the affected units.

B. If total $NO_x$ emissions during a control period in a given year from the TR $NO_x$ Ozone Season units at a TR $NO_x$ Ozone Season source are in excess of the TR $NO_x$ Ozone Season emissions limitation set forth in Condition 6.2.2(b)(i)(A) above, then:

I. The Permittee and each TR $NO_x$ Ozone Season unit at the source shall hold the TR $NO_x$ Annual allowances required for deduction under 40 CFR 97.524(d); and

II. The Permittee and each TR $NO_x$ Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBB and the Clean Air Act.

ii. Beginning May 1, 2017, if total $NO_x$ emissions during a control period in a given year from all TR $NO_x$ Ozone Season units at TR $NO_x$ Ozone Season sources in Illinois exceed the Illinois assurance level, the Permittee shall comply with the provisions of 40 CFR 97.506(c)(2).

iii. Compliance periods.

A. A TR $NO_x$ Ozone Season unit shall be subject to the requirements under Condition 6.2.2(b)(i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c)(3)(i)].

B. A TR $NO_x$ Ozone Season unit shall be subject to the requirements under Condition 6.2.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c)(3)(ii)]

iv. Vintage of allowances held for compliance.

A. A TR $NO_x$ Ozone Season allowance held for compliance with the requirements under Condition 6.2.2(b)(i)(A) for a control period in a given year must be a TR $NO_x$ Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c)(4)(i)].

B. A TR $NO_x$ Ozone Season allowance held for compliance with the requirements under Conditions 6.2.2(b)(i)(B) or 6.2.2(b)(ii) for a control period in a given year must be

a TR $NO_x$ Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c)(4)(ii)].

v. Allowance Management System requirements. Each TR $NO_x$ Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB [40 CFR 97.506(c)(5)].

vi. Limited authorization. A TR $NO_x$ Ozone Season allowance is a limited authorization to emit one ton of $NO_x$ during the control period in one year. Such authorization is limited in its use and duration as follows:

A. Such authorization shall only be used in accordance with the TR $NO_x$ Ozone Season Trading Program [40 CFR 97.506(c)(6)].

c. TR $SO_2$ Emissions Requirements

i. Pursuant to 40 CFR 97.606(c)(1), beginning January 1, 2015,

A. As of the allowance transfer deadline for a control period in a given year, the Permittee shall hold, in the source's compliance account, TR $SO_2$ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c)(3) in an amount not less than the tons of total $SO_2$ emissions for such control period from the affected units.

B. If total $SO_2$ emissions during a control period in a given year from the TR $SO_2$ Group 1 units at a TR $SO_2$ Group 1 source are in excess of the TR $SO_2$ Group 1 emissions limitation set forth in paragraph (c)(i)(A) above, then:

I. The Permittee and each TR $SO_2$ Group 1 unit at the source shall hold the TR $SO_2$ Group 1 allowances required for deduction under 40 CFR 97.624(d); and

II. The Permittee and each TR $SO_2$ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.

ii. Beginning January 1, 2017, if total $SO_2$ emissions during a control period in a given year from all TR $SO_2$ Group 1 units at TR $SO_2$ Group 1 sources in Illinois exceed the Illinois assurance level, the Permittee shall comply with the provisions of 40 CFR 97.606(c)(2).

iii. Compliance periods.

A. A TR $SO_2$ Group 1 unit shall be subject to the requirements under Condition 6.2.2(c)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c)(3)(i)].

B. A TR $SO_2$ Group 1 unit shall be subject to the requirements under Condition 6.2.2(c)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.606(c)(3)(ii)].

iv. Vintage of allowances held for compliance.

A. A TR $SO_2$ Group 1 allowance held for compliance with the requirements under Condition 6.2.2(c)(i)(A) for a control period in a given year must be a TR $SO_2$ Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c)(4)(i)].

B. A TR $SO_2$ Group 1 allowance held for compliance with the requirements under Conditions 6.2.2(c)(i)(B) or 6.2.2(c)(ii) for a control period in a given year must be a TR $SO_2$ Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c)(4)(ii)].

v. Allowance Management System requirements. Each TR $SO_2$ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC [40 CFR 97.606(c)(5)].

vi. Limited authorization. A TR $SO_2$ Group 1 allowance is a limited authorization to emit one ton of $SO_2$ during the control period in one year. Such authorization is limited in its use and duration as follows:

A. Such authorization shall only be used in accordance with the TR $SO_2$ Group 1 Trading Program [40 CFR 97.606(c)(6)].

6.2.3 Monitoring, Recordkeeping, and Reporting

a. The Permittee must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable [40 CFR 97.434(b), 40 CFR 97.534(b) and 40 CFR 97.634(b)].

b. For TR $NO_x$ Annual emissions, the Permittee shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the general monitoring,

recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.435.

c. For TR $NO_x$ Ozone Season emissions, the Permittee shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.535.

d. For TR $SO_2$ Group 1 emissions, the Permittee shall comply with the continuous monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCCC, and 40 CFR Part 75 Subparts B, F and G. These provisions include the calculation requirements specified at 40 CFR 97.606(b)(2); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.635.

6.2.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.413, 40 CFR 97.513, and 40 CFR 97.613, the Permittee shall appoint a Designated Representative, and may also appoint an Alternate Designated Representative for the affected units, in order to discharge the applicable responsibilities specified at 40 CFR 97.414 through 418 for the TR $NO_x$ Annual Trading Program; 40 CFR 97.514 through 518 for the TR $NO_x$ Ozone Season Trading Program; and 40 CFR 97.614 through 618 for the TR $SO_2$ Group 1 Trading Program.

6.2.5 Coordination with Other Requirements

a. Any provisions of the TR $NO_x$ Annual or Ozone Season or TR $SO_2$ Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such

source and the affected units at the source [40 CFR 97.406(f)(1), 40 CFR 97.506(f)(1) and 40 CFR 97.606(f)(1)].

b. Any provisions of the TR $NO_x$ Annual or Ozone Season or TR $SO_2$ Group 1 Trading Program that applies to an affected unit or the designated representative shall also apply to the owners and operators of such unit [40 CFR 97.406(f)(2), 40 CFR 97.506(f)(2) and 40 CFR 97.606(f)(2)].

c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBBB or CCCCC.

d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97 Subparts AAAAA, BBBBB, or CCCCC, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7)(h) of the Act].

## 6.3 Best Available Retrofit Technology (BART)

### 6.3.1 Description

a. Pursuant to Section 169A of the Clean Air Act, USEPA has determined that as Part of its strategy to reduce visibility impairing air pollutants, such as oxides of nitrogen ($NO_x$), sulfur dioxide ($SO_2$), and particulate matter (PM), that certain stationary emission sources should be subject to a Best Available Retrofit Technology (BART) standard. BART is defined as an "emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility" (40 CFR 51.301).

b. The sources subject to a BART standard, according to "Guidelines for BART Determinations under the Regional Haze Rule" ("BART Guidelines") published by USEPA in July of 2005, must be one of 26 specified source categories; were in existence in August 1977; began operating after August 1962; and have the potential to emit 250 tons per year or more of any air pollutant.

c. For coal-fired EGUs, the BART Guidelines provide presumptive emission limits or control levels for various boiler and coal types. The Illinois EPA has compared these presumptive BART emission levels to existing emission reduction requirements and commitments for the subject-to-BART EGUs in Illinois.

Note: The description in Condition 6.3.1 is for informational purposes only and implies no limits or constraints.

### 6.3.2 Applicability

This source is an affected source and the following emission units at the source are affected units for BART:

Boiler 1 (CB-1), and
Boiler 2 (CB-2)

### 6.3.3 BART Controls for EGUs/Emission Standards

The requirements for the affected units for $SO_2$ and $NO_x$ emissions set forth in the Multi-Pollutant Standard ("MPS") in 35 IAC 225.233 have been determined by USEPA to satisfy BART [77 Fed Reg. 39943]. The requirements are addressed in Condition 6.4 below.

## 6.4 Control of Mercury Emissions from Coal-fired Electric Generating Units

### 6.4.1 Description

The purpose of 35 IAC Part 225 Subpart B is to limit the emissions of mercury from coal-fired EGUs operating in Illinois. Compliance with mercury emission limits is demonstrated through continuous emission monitoring with either mercury CEMS units or Sorbent Trap Monitoring Systems.

Note: The description in Condition 6.4.1 is for informational purposes only and implies no limits or constraints.

### 6.4.2 List of Emission Units

The EGUs associated with the following emission units at the source are affected EGUs for the purpose of 35 IAC Part 225 Subpart B:

Boiler 1 (CB-1), and
Boiler 2 (CB-2)

### 6.4.3 Applicability

Both affected EGUs are part of the MPS Group as described in the notice of intent submitted to the Illinois EPA in accordance with 35 IAC 225.233(b), which establishes control requirements and standards for emissions of $NO_x$, $SO_2$, and mercury. The MPS Group consists of the Coffeen, Duck Creek, E.D. Edwards, Joppa and Newton Power Stations. Note that only 35 IAC Part 225.233(a),(b),(e) and (g), 35 IAC Part 225.291, 292, 293, 295 and 296, and the related variance granted by the Illinois Pollution Control Board in Case No. PCB 2014-010 have been approved in the Federal State Implementation Plan (SIP), which include the provisions relating to $SO_2$ and $NO_x$ emissions. Portions of the Illinois Mercury Rule relating to mercury emissions have not been approved in the SIP and therefore will be designated in this permit as "State-Only Requirements".

### 6.4.4 Emission Standards for EGUs

a. Pursuant to 35 IAC 225.233(d)(1), the Permittee shall comply with one of the following standards for the affected EGUs, calculated in accordance with 35 IAC 225.230(a) or (d), on a rolling 12-month basis (State-Only Requirement):

   i. An emission standard of 0.0080 lb mercury/GWh gross electrical output, provided that the Permittee monitors and records gross electrical output in accordance with 35 IAC 225.263 and 35 IAC 225.290(a)(2)(B); or

   ii. A minimum 90-percent reduction of input mercury, provided that the Permittee conducts the necessary fuel sampling, analysis and recordkeeping in accordance with 35 IAC 225.265.

b. Pursuant to 35 IAC 225.233(e)(3)(B)(iii), for the EGUs in the MPS Group, the Permittee shall comply with an overall $NO_x$ annual emission rate of no more than 0.11 lb/million Btu.

c. Pursuant to Illinois Pollution Control Board Case No. PCB 2014-010, the Permittee has been granted variances for the EGUs in the MPS Group from the applicable requirements of 35 IAC 225.233(e)(3)(C)(iii) for a period beginning January 1, 2015 through December 31, 2019 and 35 IAC 255.233(e)(3)(C)(iv) for a period beginning January 1, 2017 through December 31, 2019, subject to the following conditions:

i. Through December 31, 2019, the Permittee shall comply with an overall $SO_2$ annual emission rate of 0.35 lb/mmBtu for the MPS Group. Beginning January 1, 2020, the Permittee shall comply with an overall $SO_2$ annual emission rate of 0.23 lb/mmBtu for the MPS Group.

ii. Through December 31, 2019, the Permittee shall operate the WFGD systems at the Coffeen Power Station as needed to achieve a combined $SO_2$ removal rate for the EGUs at the Duck Creek and Coffeen Power Stations of at least 98 percent on a calendar year annual average basis.

iii. For the time period beginning October 1, 2013 through December 31, 2020, the Permittee shall comply with the MPS Group system-wide mass emissions limit for $SO_2$ of no more than 327,996 tons. The specified time period and emissions limit apply without any adjustment based on the time period of ownership of MPS Group power stations, as identified in Condition 6.4.3, by any subsidiary of Illinois Power Holdings, LLC.

iv. For the time period beginning October 1, 2013 through December 31, 2020, the Permittee shall report annually to the Illinois EPA the combined tons of mass $SO_2$ emissions and overall $SO_2$ annual emission rate from the MPS Group. The $SO_2$ emissions report must be included in the Annual Emissions Reports and show the mass $SO_2$ emissions for each year along with a running total of the remaining emissions available under the system-wide $SO_2$ emissions limit specified in Condition 6.4.4(c)(iii) above.

6.4.5 Monitoring

The Permittee shall install the monitoring systems required pursuant to 35 IAC 225 Sections 225.240 through 225.270 for monitoring mercury mass emissions (including the systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and $CO_2$ or $O_2$ concentration, as applicable, in accordance with Sections 1.15 or 1.16 of 35 IAC 225. Appendix B) (State-Only Requirement).

6.4.6 Recordkeeping

a. Pursuant to 35 IAC 225.290(a)(2), the Permittee shall maintain records for each month identifying the emission standard in Condition 6.4.4(a) used to demonstrate compliance or that is applicable for the affected EGU and the records, as specified in 35

IAC 225.290(a)(2), related to determining the emissions of mercury that the affected EGU is allowed to emit (State-Only Requirement).

b. The Permittee shall maintain records of the following data (State-Only Requirement):

   i. Monthly emissions of mercury from each affected EGU.

   ii. For an affected EGU complying by means of 35 IAC 225.230(d), records of the monthly allowable emissions of mercury from the EGU.

c. The Permittee shall maintain records related to quality assurance activities conducted for emissions monitoring systems pursuant to Section 2.2 of 35 IAC 225. Exhibit B (State-Only Requirement).

d. The Permittee shall prepare and maintain a Mercury Emissions Monitoring Plan as specified in Section 1.10 of 35 IAC Part 225. Appendix B (State-Only Requirement).

6.4.7 Reporting

a. Quarterly Reports. For any affected EGUs using CEMS or excepted monitoring systems at any time during a calendar quarter, the Permittee shall submit quarterly reports and compliance certifications to the Illinois EPA as required by 35 IAC 225.290(b) and (c) (State-Only Requirement).

b. Annual Certification of Compliance. The Permittee shall submit to the Agency an Annual Certification of Compliance with 35 IAC Part 225 Subpart B no later than May 1 of each year, addressing compliance for the previous calendar year, as required by 35 IAC 225.290(d) (State-Only Requirement).

c. Deviation Reports. For each affected EGU, the Permittee shall promptly notify the Agency of deviations from requirements of 35 IAC Part 225 Subpart B, as required by 35 IAC 225.290(e). These notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken (State-Only Requirement).

d. Quality Assurance RATA Reports. The Permittee shall submit to the Agency, Air Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs pursuant to Section 1.18(d)(4) of 35 IAC Part 225.Appendix B, within 45 days after completing a quality assurance RATA (State-Only Requirement).

6.4.8 Compliance Procedures

a. Compliance with the mercury emission limits of Condition 6.4.4(a) is addressed by continuous emission monitoring in accordance with Condition 6.4.5 and the recordkeeping required by Condition 6.4.6 (State-Only Requirement).

b. Compliance with the $NO_x$ emission limit of Condition 6.4.4(b) is addressed by the continuous emissions monitoring required by Condition 7.1.8(c) and the recordkeeping required by Condition 7.1.9(f).

c. Compliance with the $SO_2$ emission limit of Condition 6.4.4(c) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the recordkeeping required by Condition 7.1.9(e).

## 6.5 Mercury and Air Toxics Standard (MATS) (40 CFR Part 63, Subpart UUUUU)

### 6.5.1 Description

On December 16, 2011, the United States Environmental Protection Agency (USEPA) signed a rule to limit emissions of hazardous air pollutants from power plants. Specifically, these mercury and air toxics standards (MATS) for power plants limit emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury, and non-organic acid gases. It also establishes surrogate emission standards, including $SO_2$ (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The standards set work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that involves inspection, adjustment, and/or maintenance and repairs (if necessary) to ensure efficient combustion.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

### 6.5.2 Applicability Provisions

Certain affected sources, as specified below, are "affected electric utility steam generating units (EGUs)" for the purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a)(1), because the permittee owns or operates coal fired EGUs as defined at 40 CFR 63.10042. These affected EGUs are subject to the applicable requirements of the NESHAP, 40 CFR Part 63 Subpart UUUUU, and related requirements in the NESHAP General Provisions, 40 CFR Part 63, Subpart A.

Unit 1 (CB-1)
Unit 2 (CB-2)

The affected EGUs are in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

### 6.5.3 Applicable Requirements

a. Unless an affected unit complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:

   i. For non-mercury HAP metals,

      A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:

I. Emissions of filterable particulate matter shall not exceed, as a 30-boiler operating day rolling average:

a. 0.030 lb/mmBtu (mass per heat input); or

b. 0.30 lb/MWh (mass per gross output).

II. As an alternative to the standard in Condition 6.5.3(a)(i)(A)(I), the Permittee may elect to comply with the standard for individual or total non-mercury HAP metals as set forth in Condition 6.5.9(c).

ii. For mercury,

A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average:

I. 1.2 lb/TBtu (mass per heat input); or

II. 0.013 lb/GWh (mass per gross output).

B. Pursuant to 40 CFR 63.10009(a)(2), if the Permittee is using emissions averaging for mercury, emissions from the affected EGUs shall not exceed, as a 90-group boiler operating day rolling average:

I. 1.0 lb/TBtu (mass per heat input); or

II. 0.011 lb/GWh (mass per gross output).

iii. For acid gases,

A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:

I. Emissions of $SO_2$ shall not exceed, as a 30-boiler operating day rolling average:

a. 0.20 lb/mmBtu (mass per heat input); or

b. 1.5 lb/MWh (mass per gross output).

II. As an alternative to the standard in Condition 6.5.3(a)(iii)(A)(I), the Permittee may elect to comply with the standard for hydrogen chloride as set forth in Condition 6.5.9(d).

B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the $SO_2$ limit in Condition 6.5.3(a)(iii)(A)(I), the Permittee must, at all times,

operate the wet or dry flue gas desulfurization technology and the $SO_2$ CEMS installed on the affected units consistent with 40 CFR 63.10000(b).

b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with the emission standards specified in Conditions 6.5.3(a)(i), (ii)(B), and (iii).

c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.5.3(a) or to an alternate emission standard or provision in Conditions 6.5.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.5.9(a).

d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

e. Performance Tune-up Work Practices:

Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the EGU burner and combustion controls at least every 36 calendar months, or each 48 months if neural network combustion optimization software is employed, as specified at 40 CFR 63.10021(e).

6.5.4 Applicable Monitoring and Testing Requirements

a. Unless an affected unit complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:

i. For non-mercury HAP metals,

Pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.5.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.

ii. For mercury,

The Permittee shall monitor emissions of mercury from affected EGUs using a sorbent trap monitoring system in

accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.

iii. For Acid Gases,

To demonstrate compliance with the $SO_2$ emission limit specified in Condition 6.5.3(a)(iii), the Permittee shall operate and maintain an $SO_2$ CEMS in accordance with the requirements specified at 40 CFR 63.10010(f) and 40 CFR 63.10020(a) through (d).

iv. For Continuous Monitoring Systems,

A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding $CO_2$ CEMS, stack gas flow rate monitoring, and stack gas moisture content.

B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury and $SO_2$, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

6.5.5 General Testing Requirements

a. Pursuant to 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

6.5.6 General Recordkeeping Requirements

a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR Part 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).

b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).

c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b)(2)(vii) through (ix).

d. The Permittee shall keep records of any monthly fuel use, non-hazardous secondary materials combusted, and information for affected EGUs qualifying as LEE units as specified at 40 CFR 63.10032(d).

e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).

f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).

g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).

h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).

i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).

j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).

k. The Permittee shall keep sorbent trap monitoring systems and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.

l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

6.5.7 Reporting Requirements

a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):

i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 63.10030(d), to be submitted at least 30 days before the test is scheduled to begin.

ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).

iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).

iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).

v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).

vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).

vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.5.9(a)(i).

b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).

i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR Part 63

Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.

c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d)(1) and (2), the Permittee shall submit reports of performance tests and CEMS performance evaluations required by 40 CFR Part 63 Subpart UUUUU no later than 60 days after completion.

d. The Permittee shall comply with the reporting requirements for mercury CEMS and sorbent trap monitoring systems specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR Part 63 Subpart UUUUU.

e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit mercury CEMS and sorbent trap monitoring system data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.

f. The Permittee shall comply with the reporting requirements for HCl CEMS specified at Sections 11.1 through 11.4 of Appendix B to 40 CFR Part 63 Subpart UUUUU.

g. Pursuant to Section 11.5 of Appendix B to 40 CFR Part 63 Subpart UUUUU, the Permittee shall submit HCl CEMS data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.

6.5.8 Startup/Shutdown Provisions

a. Pursuant to 40 CFR 63.9991(a)(1) and 40 CFR 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGUs.

i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63. 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.

ii. Pursuant to 40 CFR 63.10030(e)(8)(iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the procedure specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).

iii. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for an EGU, the Permittee shall submit a report that identifies EGU and PM control device design characteristics and other information as specified at 40 CFR 63.10030(e)(8)(i)(A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

6.5.9 Alternative Requirements

a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

i. If the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lbs/mmBtu) to a mass per gross output basis emission limit (e. g., lbs/GW-hr), or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).

ii. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).

iii. If the Permittee elects to change other 40 CFR Part 63 Subpart UUUUU compliance demonstration methods as described by Condition 6.5.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any relevant performance test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status to Illinois EPA no later than 60 days following the change.

b. Low Emitting EGU (LEE) Alternative Requirements:

i. LEE Status for mercury (Hg):

An EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For Hg emissions from an existing EGU, either:

I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lbs/TBtu or lbs/GWh); or

II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to 40 CFR Part 63 Subpart UUUUU (expressed either in units of lbs/TBtu or lbs/GWh).

B. If test data demonstrate that an affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.5.3(b)(i) by satisfying the LEE criteria specified at 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).

C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR Part 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.

ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

An EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR Part 63, Subpart UUUUU for all required testing for 3 consecutive years.

B. If test data demonstrates that an affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.5.9(c)(i)(A)(I), 6.5.9(c)(i)(A)(II), 6.5.3(a)(i), or 6.5.9(d)(i)(A)(I), respectively, by satisfying the LEE criteria specified at 63.10005(h)(1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000(c)(1)(iii).

C. Pursuant to 40 CFR 63.10006(b)(1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install,

certify, and operate a PM CEMS, HCl CEMS, $SO_2$ CEMS, or PM CPMS, as applicable.

c. i. Non-mercury HAP Metals Alternative Requirements:

A. The Permittee may elect to comply with a non-mercury HAP metals standard as an alternative to the filterable particulate matter standard set forth in Condition 6.5.3(a)(i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

I. Emissions of total non-Hg HAP metals from the affected EGUs shall not exceed 0.000050 lb/mmBtu (mass per heat input) or 0.50 lb/GWh (mass per gross output); or

II. Emissions of individual non-Hg HAP metals (Sb, As, Be, Cd, Cr, Co, Pb, Mn, Ni, Se) shall not exceed the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

| Pollutant: | Emission Limit (Mass Per Heat Input): | OR | Emission Limit (Mass Per Gross Output): |
|---|---|---|---|
| Antimony (Sb) | 0.80 lb/TBtu | OR | 0.0080 lb/GWh |
| Arsenic (As) | 1.1 lb/TBtu | OR | 0.020 lb/GWh |
| Beryllium (Be) | 0.20 lb/TBtu | OR | 0.0020 lb/GWh |
| Cadmium (Cd) | 0.30 lb/TBtu | OR | 0.0030 lb/GWh |
| Chromium (Cr) | 2.8 lb/TBtu | OR | 0.030 lb/GWh |
| Cobalt (Co) | 0.80 lb/TBtu | OR | 0.0080 lb/GWh |
| Lead (Pb) | 1.2 lb/TBtu | OR | 0.020 lb/GWh |
| Manganese (Mn) | 4.0 lb/TBtu | OR | 0.050 lb/GWh |
| Nickel (Ni) | 3.5 lb/TBtu | OR | 0.040 lb/GWh |
| Selenium (Se) | 5.0 lb/TBtu | OR | 0.060 lb/GWh |

ii. Non-mercury HAP Metals Alternative Monitoring Provisions:

A. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 40 CFR 63.10020(a) through (d).

B. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and 40 CFR 63.10020(a)

through (d), and Table 6 to 40 CFR Part 63, Subpart UUUUU.

d. i. Acid Gases Alternative Emission Standards:

A. The Permittee may elect to comply with a standard for emissions of HCl as an alternative the $SO_2$ standards set forth in Condition 6.5.3(a)(iii)(A). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:

I. Emissions of Hydrogen Chloride shall not exceed 0.0020 lb/mmBtu (mass per heat input)or 0.020 lb/MWh (mass per gross output).

ii. Acid Gases Alternative Testing Provisions:

Pursuant to 40 CFR 63.10000(c)(1)(v), in order to demonstrate compliance with the emission standard specified in Condition 6.5.9(d)(i), if the affected source does not use an HCl continuous emission monitoring system (HCl CEMS), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

iii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.5.9(d)(i) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR Part 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from affected EGUs using a mercury CEMS monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU, as an alternative to a sorbent trap monitoring system, as described in Condition 6.5.4(a)(ii)(A).

# 7.0 UNIT SPECIFIC CONDITIONS

## 7.1 Coal Fired Boilers

### 7.1.1 Description

The Permittee operates two coal-fired boilers for electric generation. The boilers, which began operation in 1965 and 1972, have nominal capacities of 3,282 and 5,544 mmBtu/hour, respectively. In addition to coal, these boilers fire fuel oil as auxiliary fuel during startup and for flame stabilization. Periodically small amounts of used oil or boiler cleaning residue may be fired with the coal in these boilers.

Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators (ESP). Nitrogen oxide ($NO_x$) emissions from each boiler are controlled by an over-fire air system (OFA) and a Selective Catalytic Reduction system (SCR). $SO_2$ and mercury emissions are controlled with Wet Flue Gas Desulfurization systems (WFGDs). Mercury emissions are further controlled by mercury re-emission reduction systems (MRRS) which add activated carbon to the scrubbant used in the WFGDs to reduce re-emission of mercury, i.e., mercury emissions resulting from mercury returning to the elemental form as it passes through the WFGDs.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints.

### 7.1.2 List of Emission Units and Air Pollution Control Equipment

| Boiler I.D. | Description | Emission Control Equipment |
|---|---|---|
| Boiler 1 (CB-1) | Babcock & Wilcox Boiler | OFA, SCR, ESP, WFGD and MRRS |
| Boiler 2 (CB-2) | Babcock & Wilcox Boiler | OFA, SCR, ESP, WFGD and MRRS |

### 7.1.3 Applicability Provisions

a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(g) (35 IAC 212.203), and Condition 7.1.4(i) (35 IAC 216.121), during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "…to minimize startup emissions, duration of individual startups and frequency of startups."

i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.

ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:

A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.

B. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(h) and 7.1.10-2(a).

iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable standards identified or cross-referenced in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(g) (35 IAC 212.203), and Condition 7.1.4(i) (35 IAC 216.121), in the event of a malfunction or breakdown of an affected boiler, including the coal crushers, the ash removal system, or the electrostatic precipitator. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262 as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(i), and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.1.4 Applicable Emission Standards

a. The applicable requirements for the opacity of the emission of smoke or other particulate matter from the affected boilers are set forth in Condition 5.2.2(b).

b. The Acid Rain Program applicable requirements for the affected boilers are set forth in Condition 6.1.

c. The Cross-State Air Pollution Rule applicable requirements for the affected boilers are set forth in Condition 6.2.

d. The Best Available Retrofit Technology applicable requirements for the affected boilers are set forth in Condition 6.3.

e. The 35 IAC 225 Subpart B applicable requirements for the affected boilers are set forth in Condition 6.4.

f. The Mercury and Air Toxics Standards rule applicable requirements for the affected boilers are set forth in Condition 6.5.

g. i. The emissions of PM from affected boiler CB-1 shall not exceed 0.19 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.203. This standard applies because the affected boiler qualifies for the alternative

standard provided by this rule, as recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, the affected boilers had an hourly emission rate based on the stricter of the original design or equipment performance test conditions that was less than 0.20 lb/mmBtu of actual heat input, i.e., 0.14 lb/mmBtu. Thereafter, under this rule, the emission rate is not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.19 lb/mmBtu.

ii. The emissions of PM from affected boiler CB-2 shall not exceed 0.15 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.203. This standard applies because the affected boiler qualifies for the alternative standard provided by this rule, as recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, the affected boiler had an hourly emission rate based on the stricter of the original design or equipment performance test conditions that was less than 0.20 lb/mmBtu of actual heat input, i.e., 0.10 lb/mmBtu. Thereafter, under this rule, the emission rate is not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.15 lb/mmBtu.

h. The total emission of $SO_2$ from the affected boilers combined shall not exceed 55,555 lb/hour, which is equal to or less than that allowed by 35 IAC 214.143, 214.181, 214.182, and 214.184.

The following formula in 35 IAC 214.184 is used to calculate the allowed $SO_2$ emissions:

$$E = 20{,}000\ (H/300)^2$$

$$H = P_1H_1 + P_2H_2 + \ldots + P_nH_n$$

Where:

E = Total emissions of $SO_2$, in pounds per hour, from all fuel combustion emission units owned or operated by such person and located within 1 mile from the center point of any such unit.

$P_i$ = Percentage of total emissions E emitted from emission unit i divided by 100. (Note: $P_1 + P_2 + \ldots + P_n = 1$)

$H_i$ = Height in feet above grade of stack i. (Note: Pursuant to 35 IAC 214.181, the stack height used may not exceed the good engineering practice [GEP] height for such stack. The actual and GEP height of the stacks for the affected boilers is 575 ft.)

i. The emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

j. The EGUs at the source are subject to the following requirements related to $NO_x$ emissions pursuant to 35 IAC Part 217 Subpart V:

i. During each ozone control period (May 1 through September 30):

A. The emissions of $NO_x$ from each EGU shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average for that EGU, pursuant to 35 IAC 217.706(a), or

B. Notwithstanding the requirement in 7.1.4(j)(i)(A), if the Permittee elects to participate in a $NO_x$ averaging plan pursuant to 35 IAC 217.708(a), the average rate of emissions of $NO_x$ from the Permittee's EGUs and all other eligible EGUs that are participating in such $NO_x$ averaging demonstration shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period, pursuant to 35 IAC 217.708(a) and (b). For this purpose, eligible EGUs include: (1) EGUs at this source, which are authorized by this permit to participate in a $NO_x$ averaging demonstration, and (2) any other EGU that is authorized to participate in a $NO_x$ averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of that EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of $NO_x$ for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the $NO_x$ Trading Program.

ii. If the Permittee elects to have the EGU comply by participation in a $NO_x$ averaging demonstration as provided for and authorized above:

A. The EGU shall be included in only one $NO_x$ averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).

B. The $NO_x$ averaging demonstration shall only include other EGUs that are authorized through a federally enforceable permit to participate in a $NO_x$ averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(c) and (g).

C. The effect of failure of the $NO_x$ averaging demonstration to show compliance shall be that the compliance status of the EGU shall be determined pursuant to Condition 7.1.4(j)(i)(A) as if the $NO_x$ emission rates of the EGU

were not averaged with other EGUs, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than an affected boiler if the owner or operator of such EGUs elects to participate in a $NO_x$ averaging demonstration.

7.1.5 Non-Applicability of Regulations of Concern

a. Pursuant to Section 39.5(7)(a) of the Act,

i. The Permittee is shielded from the following rules for the affected boilers when the boilers are using coal or other solid fuel as their principal fuel. This is because incidental use of natural gas or liquid fuel generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.

A. 35 IAC 212.207.

B. 35 IAC 214.162.

ii. If an affected boiler is not using coal or other solid fuel as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM emissions, Condition 7.1.5(a)(ii)(A), below, shall substitute for Condition 7.1.4(g). For $SO_2$ emissions, Condition 7.1.5(a)(ii)(B), below, shall supplement Condition 7.1.4(h):

A. The emissions of PM from the affected boiler in any one -hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.10 lb/mmBtu, pursuant to 35 IAC 212.206 and 212.207.

B. The emissions of $SO_2$ from the affected boiler in any one -hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable $SO_2$ standards for heat input shall be:

I. Residual fuel oil: 1.0 lb/mmBtu. [35 IAC 214.161(a)(1)]

II. Distillate fuel oil: 0.3 lb/mmBtu. [35 IAC 214.161(a)(2)]

III. On and after January 1, 2017, in addition to the standards in Condition 7.1.5(a)(ii)(B)(I) and (II) above:

a. Residual fuel oil: 0.105 lb/mmBtu. (State-Only Requirement) [35 IAC 214.162(d) and Section 39.5(7)(a) of the Act]

b. Distillate fuel oil: 0.0015 lb/mmBtu. (State-Only Requirement) [35 IAC 214.162(d)]

iii. For the purpose of the above conditions, an affected boiler shall be considered to be using coal or other solid fuel as its principal fuel if the use of natural gas and/or fuel oil is incidental to the use of solid fuel, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, outage of a coal pulverizer, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas and/or fuel oil is more than incidental to the firing of solid fuel in the boiler or the use of solid fuel is incidental to the operation of the boiler.

iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes to or from using coal or other solid fuel as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.

b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee is conducting opacity monitoring on the affected boilers in accordance with the provisions of the NSPS, as specified at 40 CFR 75.14 of the federal Acid Rain Program.

c. The affected boilers are not subject to 40 CFR Part 60 Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators because the affected boilers commenced construction prior to the applicability date of August 17, 1971 and were not modified after the applicable date.

d. The affected boilers are not subject to 40 CFR Part 60 Subpart Da, Standards of Performance for Electric Utility Steam Generating Units because the affected boilers did not commence construction, modification or reconstruction after September 18, 1978.

e. The affected boilers are not subject to 40 CFR Part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units because the affected boilers do not combust any solid waste as that term is defined in 40 CFR part 241.

f. The affected boilers are not subject to 40 CFR Part 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters pursuant to 40 CFR 63.7491(a), because an

electric utility steam generating unit (EGU) covered by 40 CFR Part 63 Subpart UUUUU is not subject to 40 CFR Part 63 Subpart DDDDD.

g. The affected boilers are not subject to 40 CFR Part 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources because the affected boilers are not located at an Area Source of Hazardous Air Pollutants.

h. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for $SO_2$ and $NO_x$ Acid Rain Requirements, pursuant to 40 CFR 64.2(b)(1)(iii), because the affected boilers are subject to Acid Rain Program requirements.

i. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for $SO_2$ (Conditions 6.4.4(c) and 7.1.4(h)), $NO_x$ (Conditions 6.4.4(b) and 7.1.4(j)), and mercury (Condition 6.4.4(a)) State Rule Requirements, pursuant to 40 CFR 64.2(b)(1)(vi), because the affected boilers are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method.

j. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for CO (Condition 7.1.4(i)) State Rule Requirements because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

k. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for the emission standards set forth in Section 6.5 for mercury, filterable PM, total non-Hg HAP metals, individual non-Hg HAP metals, or Acid Gases, pursuant to 40 CFR 64.2(b)(1)(i), because the affected boilers are subject to emission limitations or standards proposed by the Administrator after November 15, 1990, i.e. 40 CFR Part 63, Subpart UUUUU.

7.1.6 Work Practices

a. i. As part of its operation and maintenance of the affected boilers, the Permittee shall perform a combustion evaluation on each boiler at least semi-annually, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boilers.

ii. In a semi-annual period in which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.5.3(e), such tune-up shall satisfy the semi-annual combustion evaluation requirement in Condition 7.1.6(a)(i) for that period.

b. Pursuant to 35 IAC 214.121(b)(2)(A), on and after January 1, 2017, if an affected boiler is burning liquid fuel exclusively,

i. The sulfur content of all residual fuel oil used by the affected boiler must not exceed 1000 ppm. (State-Only Requirement)

ii. The sulfur content of all distillate fuel oil used by the affected boiler must not exceed 15 ppm. (State-Only Requirement)

7.1.7 Testing Requirements

a. Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall have the PM and CO emissions of each affected boiler measured as specified below:

i. PM emission measurements shall be made no later than one year after the effectiveness of this condition.

ii. PM emission measurements shall be made within 90 days of operating an affected boiler for more than 72 hours total in a calendar quarter at a load* that is more than 15 percent higher than the greatest load on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown (refer to Condition 7.1.7(e)(iii)(E)), provided, however, that the Illinois EPA may upon request of the Permittee provide more time for testing (if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions).

* For this purpose, load shall be expressed in terms of either gross megawatt output or steam flow, consistent with the form of the records kept by the Permittee pursuant to Condition 7.1.9(a).

iii. Periodic PM emission measurements shall be made for the affected boilers within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of the affected boiler are 0.075 lb/mmBtu, the compliance margin for the applicable PM limit, 0.10 lb/mmBtu, would be 25 percent. (0.100 - 0.075 = 0.025, 0.025/0.100 = 0.25 or 25 percent)

A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.

B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.

C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.

iv. Measurements of CO emissions shall be made as follows:

A. In conjunction with the initial measurements of PM emissions as required above by Condition 7.1.7(a)(i) (unless this PM measurement is conducted prior to the issuance of this permit), if a measurement of CO emissions is not otherwise performed earlier in conjunction with a relative accuracy test audit (RATA) for $SO_2$ or $NO_x$ conducted under this permit.

B. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.1.7(a)(ii) or (iii) (or a RATA for $SO_2$ or $NO_x$ preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).

v. A. If alternative fuel (i.e., any fuel other than coal, fuel oil, or gas) is greater than 3.0 percent by weight of the fuel burned in a boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter in which alternative fuel is burned in the boiler.

B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel material in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.

C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials burned in a boiler during a quarter is more than the percentage of such material being burned in the boiler when previous emission measurements were conducted.

vi. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.

b. i. Measurements of PM and CO shall be performed at 90% or greater of the seasonal maximum operating loads of the EGUs and other operating conditions that are representative of normal operation. In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.

ii. Measurements shall be taken at an appropriate location in the ductwork or stack associated with each affected boiler.

iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

| | |
|---|---|
| Location of Sample Points | Reference Method 1 |
| Gas Flow and Velocity | Reference Method 2 |
| Flue Gas Weight | Reference Method 3 |
| Moisture | Reference Method 4 |
| Particulate Matter (PM) | Reference Method 5 |
| Carbon Monoxide (CO) | Reference Method 10 |

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA.

c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.

i. The Permittee shall submit this test plan within the time period provided in Condition 8.6.2 and the test plan shall include the information specified by Condition 8.6.2.

ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).

d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.

e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the test results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:

i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).

iii. Detailed description of operating conditions during testing, including:

A. Source(s) of fuel and specifications (ash, sulfur and heat content).

B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.

C. Combustion system information, i.e., level of excess air in the flue gas, and levels of CO, $CO_2$ or $O_2$ in the flue gas.

D. Control equipment operating parameters during testing.

E. Load during testing (gross megawatt output and steam flow).

F. Information on the usage of alternative fuel materials during testing, if testing was conducted to satisfy Condition 7.1.7(a)(v).

iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

v. The $SO_2$, $NO_x$, $O_2$ or $CO_2$, (hourly averages) and opacity data (6-minute and hourly averages) measured during testing.

7.1.8 Monitoring Requirements

a. Pursuant to 40 CFR 75.14 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers. For this purpose, "shared" monitoring systems may be operated at locations in the stacks that are common to pairs of affected boilers.

i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.

ii. These monitors shall be the primary basis for reporting of exceedances of Condition 5.2.2(b). (See Condition 7.1.10-2(a) and 7.1.10-3(a).)

b. Pursuant to 40 CFR 75.11 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of $SO_2$ emissions from the affected boilers.

i. This CEMS shall be used to demonstrate compliance with the limit in Condition 7.1.4(h) based on the average hourly $SO_2$ emission rate determined from monitored data from three-hour block averaging periods.

c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, calibrate, maintain and operate a CEMS for the measurement of $NO_x$ emissions from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.

d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including $SO_2$, $NO_x$, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.1.3) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2)

e. Compliance Assurance Monitoring (CAM) Requirements

The affected boilers are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM for the standard set forth at Condition 7.1.4(g) as addressed in Condition 7.1.13.

7.1.9 Recordkeeping Requirements

a. Operational Records for the Affected Boilers

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boilers:

i. A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler.

B. If the Permittee is relying on data for heat input for purposes of compliance with an applicable standard identified or cross-referenced in Condition 7.1.4 that

is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.

ii. Records for each day when an alternative fuel (i.e., a fuel material other than coal, gas or oil) was burned, including the estimated amount of each such material burned and the affected boiler(s) in which it was burned.

iii. Total operating hours (hours/quarter) for each affected boiler.

iv. A. Amount of coal consumed (tons/quarter).

B. Amount of each alternative fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).

v. A. Records of agreements with suppliers of alternative fuel(s), including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.

B. Records for each load of such fuel(s) received at the source, which at a minimum shall include date, supplier name, type of fuel and amount (tons).

vi. Operating records, maintenance and repair records, or other records for each affected boiler documenting the performance of the combustion evaluation required by Condition 7.1.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of any adjustments and/or corrective measures undertaken for the combustion systems of the boiler.

b. Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records for the air pollution control equipment on the affected boilers:

i. Maintenance and Repair Record

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

ii. Electrostatic Precipitators (ESPs)

When the affected boiler served by an ESP is in operation:

A. The status of each ESP field shall be recorded at least once per shift.

B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents, (2) Secondary voltages and currents and (3) Sparking rates.

iii. Selective Catalytic Reduction (SCR) Systems

A. Manufacturer/vendor or Permittee developed operating and maintenance procedures.

B. Operating records, including identification of system settings.

C. Usage of reagent (tons/month).

D. The maintenance and repair records for the SCR systems shall also address activities related to the SCR catalyst, including addition or replacement of catalyst.

iv. Mercury Re-Emission Reduction System (MRRS)

Pursuant to Construction Permit #12070042, the Permittee shall maintain records of the following:

A. The amount of activated carbon that is added to scrubbant (tons/month and tons/year) [T1].

B. The concentration of carbon (ppm) in the scrubbant on a daily basis [T1].

C. Operating records that identify each period of time when the MRRS is not available for operation with the reason for the unavailability [T1].

D. Maintenance and repair records for the MRRS system that list the activities performed, with date and description [T1].

c. Records for Continuous Monitoring Systems

i. Monitoring Plans

A. Pursuant to 40 CFR 75.53(a)(2), the Permittee shall prepare and maintain a monitoring plan for each continuous emissions or opacity monitoring system. The monitoring plan shall contain sufficient information on the continuous emission or opacity monitoring system to demonstrate that all unit $SO_2$ emissions, $NO_x$ emissions, $CO_2$ emissions, and opacity are monitored and reported.

B. Pursuant to 40 CFR 75.53(b), whenever the Permittee makes a replacement, modification, or change in the certified CEMS or continuous opacity monitoring system, including a change in the automated data acquisition and handling system or in the flue gas handling system, that

affects information reported in the monitoring plan, then the Permittee shall update the monitoring plan.

C. Pursuant to 40 CFR 75.53(e), each monitoring plan shall contain the information specified in 40 CFR 75.53(e)(1) in electronic format and the information specified in 40 CFR 75.53(e)(2) in hardcopy format. Electronic storage of all monitoring plan information, including the hardcopy portions, is permissible provided that a paper copy of the information can be furnished upon request for audit purposes.

ii. General recordkeeping provisions

A. Pursuant to 40 CFR 75.57(a), the Permittee shall maintain for each affected boiler records of all continuous monitoring system measurements, data, reports, and other information required by 40 CFR Part 75 at the source in a form suitable for inspection for at least three (3) years from the date of each record.

B. Pursuant to 40 CFR 75.57(b), the Permittee shall record for each affected boiler hourly information on unit operating time, heat input rate, and load, as specified at 40 CFR 75.57(b)(1) through (7).

d. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system on each affected boiler required by Condition 7.1.8(a) that shall include the following:

i. Operating records for each opacity monitoring system, including:

A. Opacity measurements (6-minute, one-hour and three-hour block averages).

B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.

C. Maintenance and adjustment performed.

D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.

E. Quarterly reports submitted in accordance with Condition 7.1.10-2(a) and (d).

ii. Records to address compliance with Condition 5.2.2(b) including:

A. Each period when the opacity exceeded 30 percent on a 6-minute block average, with date, time, whether it occurred during startup, malfunction, breakdown, or shutdown, and further explanation of the incident.

e. Records for Continuous $SO_2$ Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the $SO_2$ CEMS on the affected boilers required by Condition 7.1.8(b) that shall include the following:

i. Operating records for each $SO_2$ CEMS, including:

A. $SO_2$ emission data in the units of the applicable standards (lbs/mmBtu).

B. Performance testing measurements and evaluations, calibration checks, and other quality assurance /control activities.

C. Maintenance and adjustments performed.

D. Periods when the $SO_2$ CEMS was inoperative, with date, time and reason.

E. Data reduction information.

F. Quarterly reports submitted in accordance with Condition 7.1.10-2(a) and (b).

ii. Records to verify compliance with the limitation of Condition 7.1.4(h), including:

A. $SO_2$ emissions in the terms of the applicable standard (lbs/hour) from the affected boilers on an hourly basis, as derived from the data obtained by the $SO_2$ CEMS.

B. The date and time of any three-hour block averaging period when the total $SO_2$ emission rate, as recorded above, exceeded 55,555 lbs/hour as allowed by Condition 7.1.4(h), with the calculated $SO_2$ emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(h).

iii. The Permittee shall record for each hour the information required by 40 CFR 75.57(c) for each affected boiler.

f. Records for Continuous $NO_x$ Monitoring

Pursuant to Section 39.5(7)(e) of the Act and 35 IAC 217.712(a), the Permittee shall maintain records for the $NO_x$ CEMS on each affected boiler required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that shall include the following:

i. Operating records for each $NO_x$ CEMS, including:

A. $NO_x$ emission data in the units of the applicable standards (lbs/mmBtu).

B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.

C. Maintenance and adjustments performed.

D. Periods when a $NO_x$ CEMS was inoperative, with date, time and reason.

E. Data reduction information.

F. Quarterly reports submitted in accordance with Condition 7.1.10-2(a) and (c).

ii. Records to verify compliance with the $NO_x$ limitation of Condition 7.1.4(j) including:

A. $NO_x$ emissions in the terms of the applicable standard (lbs/mmBtu) from the affected boilers on an hourly basis, as derived from the data obtained by the $NO_x$ CEMS.

iii. The Permittee shall record the applicable information required by 40 CFR 75.57(d) for each affected boiler.

g. Acid Rain Program

Records for the continuous emission monitoring required for each affected boiler by the Acid Rain Program should be kept by the source in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions [See Condition 6.1.3].

h. Records for Startups of Affected Boilers, pursuant to Section 39.5(7)(b) of the Act

i. The Permittee shall maintain written startup procedures for each affected boiler, as required by Condition 7.1.3(b)(ii).

ii. The Permittee shall maintain the following records related to startups of an affected boiler:

A. For all startups on each affected boiler.

I. Date, time and duration of the startup.

II. A description of the startup, the reason(s) for the startup, and an indication of whether or not the written startup procedures were followed. If any procedures were not followed, the records

shall include any departures from those procedures and the reason those procedures could not be followed.

B. For each startup of an affected boiler where an exceedance of a relevant standard occurred during startup or the Permittee believes that compliance with the PM standard likely was not maintained during the startup, maintain the following additional records for such startup.

I. An explanation of the nature of such exceedance(s), including the qualitative or, if available, quantitative magnitude of such excess emissions.

II. A description of the actions taken or to be taken to minimize the magnitude and duration of any excess emissions.

III. An explanation whether similar incidents could be prevented in the future and, if so, a description of the actions taken or to be taken to prevent similar incidents in the future.

C. For each startup when the duration of startup from initial firing of fuel to stable operation of the generating unit at load exceeded 24 hours maintain the following additional records for such startups.

I. A description of the events that led up to the extended startup duration and reason(s) for the extended startup duration.

II. The actions taken to minimize emissions and the duration of the startup.

III. An explanation whether similar incidents might be prevented in the future and, if so, the corrective actions taken or to be taken to prevent similar incidents.

i. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boilers:

i. Maintenance and repair records for the affected boilers that address aspects or components of the boilers for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair records for control equipment required by Condition 7.1.9(b)(i), the

Permittee shall also list the reason for the activities that are performed.

ii. Records for each incident when operation of an affected boiler continued with excess opacity or emissions during malfunction or breakdown as addressed by Condition 7.1.3(c) that shall include the following information:

A. Date, time, duration (i.e., the length of time during which operation continued with excess opacity or emissions until corrective actions were taken or the boiler was taken out of service), and description of the incident.

B. The corrective actions used to reduce the quantity of emissions and to reduce the duration of the incident.

C. Confirmation of fulfillment of the requirements of Condition 7.1.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.1.10-3(a)(ii).

D. If opacity during the incident exceeded the applicable standard, as listed in Condition 5.2.2(b), for two or more hours, emissions exceeded an applicable hourly standard, as listed in Condition 7.1.4 (g) or (i), or the Permittee believes that compliance with an applicable hourly PM standard, as listed in Condition 7.1.4(g), likely was not maintained:

I. A detailed explanation why continued operation of the affected boiler was necessary.

II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boilers and associated equipment and any changes to operating and maintenance procedures.

E. If PM emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(g), or the Permittee believes that compliance with the PM standard likely was not maintained, estimates of the magnitude of emissions of PM during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.

F. If CO emissions during the incident exceeded an applicable hourly standard, as listed in Condition 7.1.4(i), estimates of the magnitude of emissions of CO during the incident, with magnitude estimated on a qualitative or, if available, quantitative basis.

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For each affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions taken and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

i. For those breakdown or malfunction PM or opacity events that require notification and reporting pursuant to Condition 7.1.10-3(a), notification and reporting shall be provided pursuant to Condition 7.1.10-3(a) rather than 7.1.10-2(d).

ii. Notification with the quarterly or annual reports required by Conditions 7.1.10-2(b), (d) and (e) for deviations from Conditions 5.2.2(b), 7.1.4(g) and (h) and from the requirements of Condition 7.1.8 for emissions monitoring, unless notification and reporting for that deviation is required pursuant to Condition 7.1.10-3(a).

iii. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations from the work practice requirements and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boilers related to deviations from permit requirements during the quarter [Section 39.5(7)(f)(i) of the Act]:

i. A listing of all notifications and reports for instances of deviations that have been provided in writing to the Illinois EPA pursuant to Condition 7.1.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.

ii. Detailed information, as required by Condition 7.1.10-1(a)(ii) or (iii), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Periodic Reporting

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

i. These reports shall include the following information for operation of each affected boiler during the quarter:

A. The total operating hours for each affected boiler, as also reported in accordance with 40 CFR Part 75.

B. The greatest hourly load achieved by each affected boiler (steam flow or gross megawatts), and total number of hours in which an affected boiler exceeded a load that was more than 15% higher than the greatest load on the boiler during the most recent set of PM tests required by Condition 7.1.7(a)(ii).

C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.

D. A list of the startups of each affected boiler, including the date, duration and description of each startup accompanied by a copy of the records maintained pursuant to Condition 7.1.9(h)(ii)(C) for each startup for which such records were required.

ii. These reports shall include the information specified in Conditions 7.1.10-2(b), (c) and (d) for $SO_2$, $NO_x$, and PM emissions and opacity from the affected boilers during the quarter and for the operation of required continuous monitoring systems during the quarter.

iii. These reports shall be submitted after the end of every calendar quarter as follows:

| Monitoring Period | Submittal Deadline |
|---|---|
| January – March | May 15 |
| April - June | August 15 |
| July – September | November 15 |
| October - December | February 15 |

b. Reporting of $SO_2$ Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

i. Summary information on the performance of the $SO_2$ CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the $SO_2$ CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).

ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boilers: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

iii. The following information for each period when $SO_2$ emissions were in excess of the applicable standard specified in Condition 7.1.4(h)*. When there were no such exceedances, this shall be stated in the report.

A. The starting date and time of the $SO_2$ excess emissions.

B. The duration of the excess emissions.

C. The one-hour and three-hour average (lb/hour) for each three-hour block of excess emissions.

D. A detailed explanation of the cause of the excess emissions if known, including whether such excess emissions occurred during startup, malfunction or breakdown of the boiler.

E. A detailed explanation of any corrective actions taken.

* For $SO_2$ emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(h). The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

c. Reporting of $NO_x$ Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

i. Summary information on the performance of the $NO_x$ CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the $NO_x$ CEMS was not inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).

ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each

period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

d. Reporting of Opacity and PM Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for each affected boiler to the Illinois EPA with its quarterly report pursuant to Condition 7.1.10-2(a):

i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" specified by 40 CFR 60.7(d). Additionally, the quarterly report shall also include:

A. The total operating time of the affected boiler; and

B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.

ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).

iii. The following information for each period when opacity exceeded 30 percent, based on a 6-minute block average:

A. A summary of information for each period of excess opacity that includes:

I. The starting date and time of the excess opacity.

II. The duration of the excess opacity.

III. The magnitude of excess opacity, based on six-minute average opacity, including:

a. The percent opacity for each six-minute period in excess of the applicable standard.

b. The start and stop time of each six-minute period in excess of the applicable standard.

IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.

V. Any corrective actions taken.

VI. Identification of any previous report for the incidents during the quarter submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

VII. Information required by Conditions 7.1.9(i)(ii)(A), (B), and (D)(I) for incidents when operation of an affected boiler continued during malfunction or breakdown with excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

Note: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for an affected boiler for opacity, pursuant to the federal Acid Rain Program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 [35 IAC 201.403(a)].

iv. The following information for periods when PM emissions were in excess of the limitations in Condition 7.1.4(g). If there were no such periods of excess emissions during the reporting period, the quarterly report shall so state.

A. A summary of information for each period of excess emissions that includes:

I. The starting date and time of the excess emissions.

II. The duration of the excess emissions.

III. The qualitative or, if available, quantitative magnitude of the excess emissions.

IV. The means by which the excess emissions were indicated or identified, if other than the level of opacity.

V. A detailed explanation of the cause of the excess emissions, if known, including whether such excess emissions occurred during startup, malfunction or breakdown.

VI. A detailed explanation of any corrective actions taken.

VII. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii), if any. For this purpose, the Permittee need not resubmit copies of

such report but may elect to supplement such material.

v. The following further information related to opacity exceedances or groups of opacity exceedances during the quarter that resulted from the same or similar cause(s):

A. For opacity exceedances or groups of exceedances with "recurring" cause(s) (i.e., cause(s) that also resulted in exceedances(s) during the previous quarter): an explanation of any particular circumstances or factors during the current quarter that affected the number or magnitude of such exceedances; a discussion of any changes in the corrective actions taken in response to such exceedances during the current quarter as compared to the previous quarter; and a discussion of any additional preventative measures that were taken during the current quarter to reduce the number or magnitude of exceedance(s).

B. For opacity exceedances or groups of exceedances with "new" cause(s) (i.e., cause(s) that did not result in opacity exceedance(s) during the previous quarter): an explanation of the cause(s) or probable cause(s) of such exceedance(s), to the extent known; a discussion of any particular circumstances or factors during the quarter that resulted in such exceedance(s); the corrective action(s) taken, if any, with explanation of how those action(s) functioned to end the exceedance(s); and a discussion of any preventive measures taken to reduce the number or magnitude of exceedance(s).

vi. A glossary of specialized technical terms commonly used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d).

e. Reporting of $NO_x$ Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boilers have complied with Condition 7.1.4(j), pursuant to 35 IAC 217.712(d) and (e).

i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(j)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and $NO_x$ emissions of the unit for the ozone control period.

ii. If the Permittee is demonstrating compliance by means of "$NO_x$ averaging" as authorized by Condition 7.1.4(j)(i)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

A. In all cases, for each affected boiler covered by this permit that is participating in a $NO_x$ averaging demonstration, the Permittee shall report the following:

I. Identification of the other EGUs that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(e)(ii)(B) below.

II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).

III. The average $NO_x$ emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e)(2) and (3), including the heat input and $NO_x$ emissions of the unit for the ozone control period.

IV. A statement whether the unit would show compliance on its own in the absence of averaging.

B. If the Permittee is the lead party for a $NO_x$ averaging demonstration that includes units operated by other companies, the Permittee shall report the following:

I. Copies of the information provided by other parties to the lead party for the EGU participating in the demonstration, which include all material required by Condition 7.1.10-2(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged $NO_x$ emission rate for all EGUs participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e)(1).

III. A statement whether the demonstration shows compliance.

f. Submittal of Supplemental Information Related to $NO_x$ Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

g. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports [See Condition 6.1.3]. Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.1.10-3 Reporting Requirements – Notifications

a. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, for incidents when operation of an affected boiler continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of an affected boiler.

i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail for each incident in which the opacity from an affected boiler exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of an affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10-2(d).)

ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days, providing a copy of the records for the incident required by Condition 7.1.9(i)(ii)(A), (B) and (D).

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC

201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.

b. Burning of coal or a mix of coal from different suppliers.

c. Burning of the following materials in conjunction with burning of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers, and that such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:

   i. Used oil and boiler cleaning residue generated at the source.

   ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or hazardous waste, provided that such fuels are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel). Such alternative fuels include materials such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber, shredded polyethylene agricultural containers, and seed corn.

   Note: Other requirements unrelated to air pollution control may apply to burning of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

a. i. Compliance with the opacity limitation of Condition 5.2.2(b) (30 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.1.8(a) and the recordkeeping requirements of Condition 7.1.9.

   ii. Notwithstanding Condition 7.1.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from an affected boiler, the Permittee shall do the following:

      A. Maintain records for each affected boiler of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 15 seconds apart, or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the boiler exceeded 30 percent opacity.

      B. Have the capability to review such short-term opacity data for each affected boiler to identify:

I. Any hour in which opacity exceeded 30 percent, and then, for such hour: (1) the duration of opacity in excess of 30 percent; (2) whether opacity ever exceeded 60 percent; and (3) whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.

II. For each affected boiler, whether opacity in excess of 30 percent occurred in more than three hours in a 24-hour period.

C. For other emission units at the source, have the ability to review any opacity data required to be collected and kept pursuant to other provisions of this permit and that is representative of such units.

D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data shows that the terms of 35 IAC 212.123(b) are satisfied, when 35 IAC 212.123(b) is relied upon.

E. Notify the Illinois EPA with its next quarterly report if it changes the type of short term opacity data that it is collecting pursuant to Condition 7.1.12(a)(ii)(A) for use in conjunction with reliance on 35 IAC 212.123(b).

b. Compliance with PM emission limits of Condition 7.1.4(g) is addressed by continuous opacity monitoring in accordance with Condition 7.1.8(a), PM testing in accordance with Condition 7.1.7, and the recordkeeping required by Condition 7.1.9.

c. Compliance with the $SO_2$ emission limits of Condition 7.1.4(h) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the recordkeeping required by Condition 7.1.9(e).

d. Compliance with the CO emission limitation of Condition 7.1.4(i) is addressed by the required work practices in Condition 7.1.6(a), emission testing in accordance with Condition 7.1.7 and the recordkeeping required by Condition 7.1.9.

e. Compliance with the $NO_x$ emission limitations of Condition 7.1.4(j) is addressed by the continuous emissions monitoring required by Condition 7.1.8(c) and the recordkeeping required by Condition 7.1.9(f).

f. Compliance with the work practices required by Condition 7.1.6(a) is addressed by the recordkeeping required by Condition 7.1.9.

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

7.1.13 Compliance Assurance Monitoring Requirements

a. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the CAM requirements in Tables 7.1.13a and 7.1.13b below.

b. Pursuant to 40 CFR 64.7(a), the Permittee shall comply with the following CAM requirements and the requirements in Condition 7.1.13(c) through (f).

i. Proper Maintenance and Continued Operation

A. Pursuant to 40 CFR 64.7(b), at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

B. Pursuant to 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit (PSEU) is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

ii. Response to Excursions

A. Pursuant to 40 CFR 64.7(d)(1), upon detecting an excursion, the Permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up

actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

B. Pursuant to 40 CFR 64.7(d)(2), determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

c. Recordkeeping

Pursuant to 40 CFR 64.9(b)(1), the Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Conditions 7.1.9(d)(i) or 7.1.13 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

d. Reporting

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall submit the following as part of the Quarterly Monitoring Reports required by Condition 7.1.10-2.

i. Summary information on the number, duration, and cause of excursions, and the corrective actions taken pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(i), and Condition 7.1.10-2(d)(iv), except as otherwise provided in 40 CFR Part 64, including 64.7(d).

ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks pursuant to 40 CFR 64.6(c)(3), 40 CFR 64.9(a)(2)(ii), and Condition 7.1.10-2(d)(i) and (ii).

e. Quality Improvement Plans (QIP)

Pursuant to 40 CFR 64.8, based on the results of any future determination made under 40 CFR 64.7(d)(2), the Administrator or the Illinois EPA may require the Permittee to develop and implement a QIP under separate permit action, as appropriate, under Sections 39.5(14), (15), or (16) of the Act.

f. Need for Improved Monitoring

Pursuant to 40 CFR 64.7(e), if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results

of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Illinois EPA within 30 days of identification and, if necessary, submit to the Illinois EPA a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

Table 7.1.13a CAM Plan for Boiler 1 (CB-1) – 35 IAC 212.203

| | | |
|---|---|---|
| PSEU Designation: | Boiler 1 (CB-1) | |
| Pollutant: | Particulate Matter (PM) Emissions | |
| Indicators: | #1) COMS Opacity | #2) Scrubber Recycle Pumps |
| **General Criteria** | | |
| The Monitoring Approach Used to Measure the Indicators: | The opacity is measured using a Continuous Opacity Monitoring System (COMS) in the duct work between the ESP and WFGD. The saturated stack conditions preclude measurement of opacity in the exhaust stack.<br>The number of scrubber recycle pumps in service is recorded by plant data systems. The number of recycle pumps is an indicator for proper operation of the scrubber system. | |
| The Indicator Range Which Provides a Reasonable Assurance of Compliance: | An excursion is defined as an event during which both (a) a measured opacity exceeds 30 percent, based on a three-hour block average of COMS data, excluding those events defined as startup, shutdown or malfunction, and (b) fewer than two pumps are in service, excluding those events defined as startup, shutdown, or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level. If measured opacity exceeds the opacity indicator, then proper operation of the scrubber system becomes relevant for purposes of providing reasonable assurance of PM compliance. Two or more pumps in service is an indicator of proper scrubber operation during normal operation. This is the minimum number of pumps that will be in service excluding those events defined as startup, shutdown, or malfunction. The number of pumps in service has been established at a level that provides a reasonable assurance of PM compliance. | |
| Quality Improvement Plan (QIP) Threshold Levels: | A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMs monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation. | |
| **Performance Criteria** | | |
| The Specifications for Obtaining Representative Data: | Opacity is related to the size and concentration of particles in the flue gas. As particulate mass emissions increase, it can be reasonably expected that opacity will also increase. Unit 1 discharges to the stack with no stack bypass capabilities. The COMS meets the installation and minimum acceptable accuracy requirements as specified in the applicable version of 40 CFR 60, Performance Specification 1. The COMS is located downstream of the ESP and, therefore, reflects the performance of the ESP. | Pump motor amperage is recorded by plant data systems. Motor amperage is representative of power to the motor and thereby is indicative of pump operation. |
| Verification Procedures to Confirm the Operational Status of the Monitoring: | Not applicable. Monitoring approach uses existing equipment. | The operational status of recycle pump monitoring was verified during the correlation testing. |
| Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data: | Daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in the applicable version of Performance Specification (PS) 1. | Not applicable. Amperage data is used to indicate pump operation. Amperage data need not be exact. |
| Monitoring Frequency: | Continuous | Continuous |
| The Data Collection Procedures That Will Be Used: | The COMS collects a data point every 10 seconds and the CEMS data acquisition system reduces the data to three-hour block averages. | The DCS collects amperage data and the data is recorded hourly. The number of pumps in service will be calculated by counting the number of pumps with amperage >0 in any operating hour. |
| Data Averaging Period: | Three-hour block averages | Three-hour block averages |

Table 7.1.13b CAM Plan for Boiler 2 (CB-2) – 35 IAC 212.203

| | | |
|---|---|---|
| PSEU Designation: | Boiler 2 (CB-2) | |
| Pollutant: | Particulate Matter (PM) Emissions | |
| Indicators: | #1) COMS Opacity | #2) Scrubber Recycle Pumps |
| **General Criteria** | | |
| The Monitoring Approach Used to Measure the Indicators: | The opacity is measured using a Continuous Opacity Monitoring System (COMS) in the duct work between the ESP and WFGD. The saturated stack conditions preclude measurement of opacity in the exhaust stack.<br>The number of scrubber recycle pumps in service is recorded by plant data systems. The number of recycle pumps is an indicator for proper operation of the scrubber system. | |
| The Indicator Range Which Provides a Reasonable Assurance of Compliance: | An excursion is defined as an event during which both (a) a measured opacity exceeds 30 percent, based on a three-hour block average of COMS data, excluding those events defined as startup, shutdown or malfunction, and (b) fewer than two pumps are in service, excluding those events defined as startup, shutdown, or malfunction. The opacity indicator level has been established at a level that provides reasonable assurance that particulate matter emissions are in compliance when opacity is equal to or less than the indicator level. If measured opacity exceeds the opacity indicator, then proper operation of the scrubber system becomes relevant for purposes of providing reasonable assurance of PM compliance. Two or more pumps in service is an indicator of proper scrubber operation during normal operation. This is the minimum number of pumps that will be in service excluding those events defined as startup, shutdown, or malfunction. The number of pumps in service has been established at a level that provides a reasonable assurance of PM compliance. | |
| Quality Improvement Plan (QIP) Threshold Levels: | A QIP is not being considered at the time of this CAM Plan submission. Currently, there is no indication of any deficiencies in the monitoring approach selected. The COMs monitoring requirements provide the specific QA/QC procedures for data collection, recordkeeping and reporting for determining "reasonable" assurance of compliance with the applicable PM limitation. | |
| **Performance Criteria** | | |
| The Specifications for Obtaining Representative Data: | Opacity is related to the size and concentration of particles in the flue gas. As particulate mass emissions increase, it can be reasonably expected that opacity will also increase. Unit 2 discharges to the stack with no stack bypass capabilities. The COMS meets the installation and minimum acceptable accuracy requirements as specified in the applicable version of 40 CFR 60, Performance Specification 1. The COMS is located downstream of the ESP and, therefore, reflects the performance of the ESP. | Pump motor amperage is recorded by plant data systems. Motor amperage is representative of power to the motor and thereby is indicative of pump operation. |
| Verification Procedures to Confirm the Operational Status of the Monitoring: | Not applicable. Monitoring approach uses existing equipment. | The operational status of recycle pump monitoring was verified during the correlation testing. |
| Quality Assurance and Quality Control (QA/QC) Practices that Ensure the Validity of the Data: | Daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in the applicable version of Performance Specification (PS) 1. | Not applicable. Amperage data is used to indicate pump operation. Amperage data need not be exact. |
| Monitoring Frequency: | Continuous | Continuous |
| The Data Collection Procedures That Will Be Used: | The COMS collects a data point every 10 seconds and the CEMS data acquisition system reduces the data to three-hour block averages. | The DCS collects amperage data and the data is recorded hourly. The number of pumps in service will be calculated by counting the number of pumps with amperage >0 in any operating hour. |
| Data Averaging Period: | Three-hour block averages | Three-hour block averages |

## 7.2 Coal Handling Equipment

### 7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including railcar and truck unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and silos. These operations first handle coal, as supplied by the mine and then, after the crushers, coal that has been processed at the source by the coal processing equipment (See Section 7.3). Particulate matter (PM) emissions associated with these operations are controlled by various measures such as the moisture content of the coal, dust suppression, enclosures and covers, and dust collection equipment.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints.

### 7.2.2 List of Emission Units and Air Pollution Control Equipment

Coal Unloading by Railcar
Coal Unloading by Truck
Coal Transfer Conveyors
Enclosures, Covers, Buildings, and Water Spray
Coal Storage Piles
Surge Bin with Bin Vents
Lowering Well
Coal Storage Silos

### 7.2.3 Applicability Provisions

a. The "affected operations" for the purpose of these unit-specific conditions, are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.2.1 and 7.2.2.

b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected operation in violation of the applicable standards identified or cross-referenced in Condition 7.2.4(b) (35 IAC 212.123) and Condition 7.2.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected operation. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262 as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

   i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as

necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected operation, remove the affected operation from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(f) and 7.2.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected operations is set forth in Condition 5.2.2(a).

b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected operations is set forth in Condition 5.2.2(b).

c. The affected processes listed below shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each conveyor or surge bin,

shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)].

i. Coal Transfer Conveyors

ii. Surge Bin with Bin Vents

7.2.5 Non-Applicability of Regulations of Concern

a. The affected operations listed below are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323:

i. Coal Unloading by Railcar

ii. Coal Unloading by Truck

iii. Coal Storage Silos

iv. Coal Storage Piles

v. Lowering Well

b. The affected operations are not subject to the NSPS, "Standards of Performance for Coal Preparation and Processing Plants", 40 CFR 60 Subpart Y, because the affected operations were not constructed, reconstructed or modified after October 27, 1974.

c. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.2.6 Work Practices, Operational and Production Limits, and Emission Limitations

a. i. The Permittee shall implement and maintain the control measures for the affected operations, such as enclosure, covers, natural surface moisture, application of dust suppressant, and use of dust collection equipment, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.2.4 and 7.2.6(b), pursuant to Section 39.5(7)(a) of the Act.

ii. The control measures implemented and maintained shall be identified and operated in conformance with the record required by Condition 7.2.9(b)(i) to satisfy Condition 7.2.6(a)(i).

b. The PM emissions from the surge bin shall not exceed 0.32 lbs/hr and 1.4 tons/yr [T1].

Note: The above limitations were established in Permit #01090039.

7.2.7 Opacity Observations and Emission Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected operation, observations shall be conducted not later than two years of the effectiveness of this condition.

B. Thereafter, for each affected operation, observations shall be conducted every third year.

C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected operation(s) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

iii. A. For each set of observations required by Conditions 7.2.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observations(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.2.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and identify the observer's current employer. This report shall also include the following for each observation:

A. Identify the affected operation for which observations were conducted.

B. Date and time of observations.

C. Description of observation condition, including recent weather.

D. Description of the operating conditions of the affected operation.

E. Raw data.

F. Opacity determinations.

G. Conclusions.

b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected operations, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.

ii. A. Testing shall be conducted using appropriate Reference Methods, including Reference Method 5 or 17 for PM emissions.

B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.

iii. The Permittee shall submit a test plan as required by Condition 8.6.2.

iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall expeditiously submit a complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of the affected operations during testing, including operating rate (tons/hr) and the control devices being used.

7.2.8 Inspection Requirements

a. The Permittee shall perform inspections of the affected operations on at least a monthly basis to confirm compliance with the requirements of Condition 7.2.6(a). If an affected operation is

not in use during an inspection, this shall be noted in the inspection record. The records required by Condition 7.2.9(d) for these inspections shall be signed-off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act.].

b. As part of the inspections of Condition 7.2.8(a), the Permittee shall perform observations of the affected operation(s) for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.2.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.2.7(a). These observations may be scheduled so that only a number of affected operations are reviewed during each inspection, provided however, that each affected operation that is in routine service shall be observed at least once during each calendar year in which it is in use. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or shall conduct observations of opacity by Method 9 within one week as required in Condition 7.2.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.2.8(b), such observations are not subject to the notice requirements of Condition 7.2.7(a)(iii) through (v) [Sections 39.5(7)(a) and (d) of the Act.].

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected operations, pursuant to Sections 39.5(7)(a) and (e) of the Act:

a. Maximum operating capacity of each affected operation, (tons/hr).

b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected operation for which a control measure(s) must be implemented and maintained pursuant to Condition 7.2.6(a)(i).

A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;

B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;

C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and

D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and

whether they would take the place of or supplement the primary control measures.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.2.9(b)(i) for the surge bins are sufficient to assure compliance with the emission limitations in Condition 7.2.6(b) (lbs/hr PM and tons PM/yr), and that the control measures identified in the record required by Condition 7.2.9(b)(i) for the coal transfer conveyors and surge bins are sufficient to assure compliance with Condition 7.2.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include results of any testing conducted pursuant to Condition 7.2.7(b), the information addressed by Condition 7.2.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

iii. Any revisions after the effective date of this permit to the record required by Condition 7.2.9(b)(i) related to control measures or affected operations, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

c. The Permittee shall maintain a record of the amount of coal and other solid fuels received at the source, by type of fuel (tons/month and tons/year).

d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:

i. Date and time the inspection was performed, name(s) of inspection personnel, and specific operation(s) inspected.

ii. The observed condition of the control measures identified in the record required by Condition 7.2.9(b)(i) for each inspected affected operation, including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the operation.

iii. A description of any maintenance or repair of equipment associated with the control measures identified in the record required by Condition 7.2.9(b)(i) that is recommended as a result of the inspection and associated work order number(s).

iv. A description of any corrective action taken, if visible emissions were observed including whether the corrective action took place within 2 hours of the observation and

whether the status of the operation returned to no visible emission.

e. The Permittee shall maintain records of the following for each incident when any affected operation was in use without the control measure(s) required pursuant to the record required by Condition 7.2.9(b)(i) and each incident when an affected operation continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.2.3(b):

i. The date of the incident and identification of the affected operation(s) that was involved.

ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.2.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.2.4.

iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.

iv. The length of time after the incident was identified that the affected operations continued to operate before the control measures identified in the record required by Condition 7.2.9(b)(i) were in place or the operations were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without the control measures required pursuant to the record required by Condition 7.2.9(b)(i) and the estimated amount of coal handled during the incident.

vi. A discussion of the probable cause of the incident and any preventative measures taken.

f. The Permittee shall keep a maintenance and repair record for each item of air pollution control equipment, i.e., each dust suppressant application system, associated with affected operations. This record shall list the date and nature of maintenance and repair activities performed on the control measures identified in the record required by Condition 7.2.9(b)(i). (See also Condition 9.6.1, Control Equipment Maintenance Records.)

g. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.2.7 (Opacity Observations and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected operation(s), the observed opacity, copies of the raw data sheets for the observations , and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.2.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.2.8(b).

h. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records of actual PM emissions (tons/year) from the surge bin, based on the records required by Condition 7.2.9(b)(ii).

7.2.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected operations, as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.2.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.2.10(b)(i) rather than 7.2.10(a).

ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected operation for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.2.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.2.9(e).

iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.2.10(a)(ii) or 7.2.10(b)(i), as referenced in 7.2.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.2.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with

a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected operation(s) continued with excess opacity or emissions during malfunction and breakdown as addressed by Condition 7.2.3(b).

i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(b)(ii).)

B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days, providing a copy of the records for the incident required by Condition 7.2.9(e).

ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess opacity or emissions. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

A. A listing of such incidents, in chronological order, that includes:

I. The date, time, and duration of each incident;

II. The identity of the affected operation(s) involved in the incident; and

III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.2.10(b)(i)(B), with the date of the notice.

B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.

C. The sum duration of all incidents during the quarter.

D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Handling of solid fuels other than coal.

b. Operation of additional dust suppressant systems.

c. Operation of additional dust collection equipment.

d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.2.12 Compliance Procedures

a. Compliance with Condition 7.2.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.2.7(a), 7.2.8, and 7.2.9, respectively.

b. Compliance with Condition 7.2.6(a) is addressed by the inspections and recordkeeping required by Conditions 7.2.8, and 7.2.9, respectively.

c. Compliance with Condition 7.2.6(b) is addressed by the testing, inspections and recordkeeping required by Conditions 7.2.7(b), 7.2.8, and 7.2.9, respectively.

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

## 7.3 Coal Processing Equipment

### 7.3.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with crushers that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures such as moisture content of the coal, dust suppression, and enclosures and covers.

Note: The description in Condition 7.3.1 is for informational purposes only and implies no limits or constraints.

### 7.3.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the coal processing equipment and associated control systems at the source.

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| Crusher House | Coal Crushing Operation | Enclosures, Covers and Dust Suppressant Application System |

### 7.3.3 Applicability Provisions

a. i. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit that prepares coal for use as a fuel by crushing the coal as described in Conditions 7.3.1 and 7.3.2.

ii. Certain affected processes, as follows, for which construction, modification, or reconstruction, commenced after October 24, 1974 but prior to April 28, 2008 are also "affected facilities" for purposes of the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y, pursuant to 40 CFR 60.250(a), and (b), and 60.251. This is because this source processes more than 200 tons per day of coal by breaking or crushing. These affected facilities are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart Y and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

A. Coal crushers.

b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 7.3.4(b) (35 IAC 212.123) and Condition 7.3.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will

be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(e) and 7.3.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.3.4 Applicable Emission Standards

a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).

b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).

c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into

the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each coal crusher, shall demonstrate compliance individually. (See also Attachment 1.) [35 IAC 212.321(a)]

d. The affected processes that are also affected facilities subject to the NSPS, 40 CFR 60 Subpart Y (i.e., coal crusher), shall not exhibit 20 percent opacity or greater into the atmosphere, except during periods of startup, shutdown and malfunction, as defined in 40 CFR 60.2, pursuant to 40 CFR 60.11(c), and 40 CFR 60.254(a).

7.3.5 Non-Applicability of Regulations of Concern

a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.6 Work Practices, Operational and Production Limits and Emission Limitations

a. i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosure, covers, natural surface moisture, and application of dust suppressant, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Conditions 7.3.4 and 7.3.6(b) [Section 39.5(7)(a) of the Act].

ii. The control measures implemented and maintained shall be identified and operated in conformance with the record required in Condition 7.3.9(b)(i) to satisfy Condition 7.3.6(a)(i).

iii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate each affected process that is subject to the NSPS in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

b. Pursuant to Construction Permit #01040033,

i. The material throughput of the affected processes shall not exceed 1350 tons/hour [T1].

ii. The PM emissions from the affected processes shall not exceed the following limits [T1].

| (Lbs/Ton) | (Lbs/Hour) | (Tons/Year) |
|---|---|---|
| 0.02 | 2.7 | 11.8 |

7.3.7 Opacity Observations and Emission Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected process, observations shall be conducted not later than two years after the effectiveness of this condition.

B. Thereafter, for each affected process, observations shall be conducted every third year.

C. Upon written request by the Illinois EPA, such observations shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee received the request or on such later date agreed to by the Illinois EPA.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

iii. A. For each set of observations required by Conditions 7.3.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).

iv. The Permittee shall provide a copy of its observer’s readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for these observations not later than 30 days of the date of completion of each set of opacity observations required by Conditions 7.3.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Method 9 certification of each observer and identify the observer’s current employer. This report shall also include the following for each observation:

A. Identify the affected process for which observations were conducted.

B. Date and time of observations.

C. Description of observation conditions, including recent weather.

D. Description of the operating conditions of the affected processes.

E. Raw data.

F. Opacity determinations.

G. Conclusions.

b. i. Within 90 days after the Permittee has received a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.

ii. A. Testing shall be conducted using appropriate Reference Methods, including Method 5 or 17 for PM emissions.

B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.

iii. The Permittee shall submit a test plan as required by Condition 8.6.2.

iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall expeditiously submit complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and a detailed description of the operating conditions of the affected process during testing, including operating rate (tons/hr) and the control devices being used.

7.3.8 Inspection Requirements

a. The Permittee shall perform inspections of the affected processes on at least a monthly basis, to confirm compliance with the requirements of Condition 7.3.6(a). If an affected process is not in operation during an inspection, this shall be noted in the inspection record. The records required by Condition 7.3.9(c) for these inspections shall be signed-off by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act].

b. As part of the inspections required by Condition 7.3.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.3.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.3.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that each affected process that is in routine service shall be observed at least once during each calendar year in which it is operating. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.3.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.3.8(b), such observations are not subject to the notice requirements of Condition 7.3.7(a)(iii) through (v) [Sections 39.5(7)(a) and (d) of the Act.].

7.3.9 Recordkeeping Requirements

a. The Permittee shall maintain records of the following for the affected processes, pursuant to Sections 39.5(7)(a) and (e) of the Act:

   i. Maximum operating capacity of each affected process, (tons/hr).

b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.3.6(a)(i).

   A. The type of emission unit (crushers, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;

   B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;

   C. Description of the primary control measures that are utilized, with a description of the control measure and

estimated frequency of application, if not continuous; and

D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.3.9(b)(i) are sufficient to assure compliance with Condition 7.3.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include results of any testing conducted pursuant to Condition 7.3.7(b), the information addressed by Condition 7.3.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

iii. Any revisions after the effective date of this permit to the record required by Condition 7.3.9(b)(i) related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

c. The Permittee shall maintain a record of the amount of coal and other solid fuels processed by the affected processes (tons/month and tons/year).

d. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:

i. Date and time the inspection was performed, name(s) of inspection personnel, and specific affected process(es) inspected.

ii. The observed condition of the control measures identified in the record required by Condition 7.3.9(b)(i) for each inspected affected process(es) including the presence of any visible emissions or atypical accumulations of coal fines in the vicinity of the process.

iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.3.9(b)(i) that are recommended as a result of the inspection and associated work order number(s).

iv. A description of any corrective action taken if visible emissions were observed, including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emission.

e. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measures required pursuant to the record required by Condition 7.3.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.3.3(b):

i. The date of the incident and identification of the affected process(es) that was involved.

ii. A description of the incident, including the control measures that were not present or operated as required by the record identified in Condition 7.3.9(b)(i); other control measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.3.4.

iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.

iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.3.9(b)(i) were in place or the processes were shut down (to resume operation only after such control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measure(s) required pursuant to the record required by Condition 7.3.9(b)(i) and the estimated amount of coal processed during the incident.

vi. A discussion of the probable cause of the incident and any preventative measures taken.

f. The Permittee shall keep a maintenance and repair record for each item of air pollution control equipment associated with affected processes. This record shall list the date and nature of maintenance and repair activities performed on the control measures identified in the record required by Condition 7.3.9(b)(i). (See also Condition 9.6.1, Control Equipment Maintenance Records.)

g. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.3.7 (Opacity Observations and Emission Testing Requirements) or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.3.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.3.8(b).

h. To demonstrate compliance with Condition 7.3.6(b), the Permittee shall keep records of actual PM emissions (tons/year) from the affected processes, based on the records required by condition 7.3.9(b)(ii).

7.3.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.3.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.3.10(b)(i) rather than 7.3.10(a).

ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.3.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(e).

iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.3.10(a)(ii) or 7.3.10(b)(i), as referenced in 7.3.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.3.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that

have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.3.3(b).

i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from a process exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(b)(ii).)

B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days, providing a copy of the records for the incident required by Condition 7.3.9(e).

ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

A. A listing of such incidents, in chronological order, that includes:

I. The date, time, and duration of each incident;

II. The identity of the affected process(es) involved in the incident; and

III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.3.10(b)(i)(B), with the date of the notice.

B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.

C. The sum duration of all incidents during the quarter.

D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Handling of solid fuels other than coal.

b. Operation of additional dust suppressant systems.

c. Operation of additional dust collection equipment.

d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling visible emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.3.12 Compliance Procedures

a. Compliance with Condition 7.3.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.3.7(a), 7.3.8, and 7.3.9, respectively.

b. Compliance with Condition 7.3.6(a) is addressed by the inspections and recordkeeping required by Conditions 7.3.8, and 7.3.9, respectively.

c. Compliance with Condition 7.3.6(b) is addressed by the testing, inspections, and recordkeeping required by Conditions 7.3.7(b), 7.3.8, and 7.3.9, respectively.

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

## 7.4 Fly Ash Equipment

### 7.4.1 Description

The Permittee operates a fly ash removal system that handles and stores fly ash collected at the coal-fired boilers. Associated particulate matter (PM) emissions are controlled by various control measures such as enclosures and covers. The Fly Ash Wet Mixing System is used to condition fly ash from Coffeen Units 1 and 2 to facilitate handling and placement of the ash in an on-site landfill facility.

Note: The description in Condition 7.4.1 is for informational purposes only and implies no limits or constraints.

### 7.4.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the fly ash equipment and associated emission control systems at the source:

| Emission Unit Description | Emission Control Equipment |
|---|---|
| Dry Fly Ash Handling and Conveying System (FHS) with Bin Vents | Enclosures and Covers |
| Fly Ash Silos with Bin Vents and Loadouts | Enclosures and Covers |
| Fly Ash Wet Mixing System (Pug Mill) | Enclosures, Covers and water incorporation |

### 7.4.3 Applicability Provisions

a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that handles fly ash as described in Conditions 7.4.1 and 7.4.2.

b. Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected process in violation of the applicable standards identified or cross-referenced in Condition 7.4.4(b) (35 IAC 212.123) and Condition 7.4.4(c) (35 IAC 212.321(a)) in the event of a malfunction or breakdown of an affected process. This authorization is provided pursuant to 35 IAC 201.149, 201.261, and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

   i. This authorization only allows such continued operation as related to the operation of the coal-fired boilers as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not

extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected process, remove the affected process from service, or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.4.9(e) and 7.4.10(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected process out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.4.4 Applicable Emission Standards

a. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).

b. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b).

c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each fly ash conveyor, fly ash silo or fly ash wet mixing system, shall demonstrate compliance individually. (see also Attachment 1) [35 IAC 212.321(a)].

7.4.5 Non-Applicability of Regulations of Concern

a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.4.6 Work Practices and Emission Limitations

a. i. The Permittee shall implement and maintain the control measures for the affected processes, such as enclosures and covers, for emissions of particulate matter to support the periodic monitoring for the applicable requirements in Condition 7.4.4, pursuant to Section 39.5(7)(a) of the Act.

ii. The control measures implemented and maintained shall be identified and operated in conformance with the record required by Condition 7.4.9(b)(i) to satisfy Condition 7.4.6(a)(i).

b. Pursuant to Construction Permit #08050053, PM emissions from the Fly Ash Wet Mixing System shall not exceed 0.44 tons per year. [T1]

c. Pursuant to Construction Permit #07110031, PM emissions from the Unit No. 2 Fly Ash Handling System shall not exceed 0.22 pounds per hour and 0.98 tons per year [T1].

7.4.7 Opacity Observation Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected process, observations shall be conducted not later than two years of the effectiveness of this condition.

B. Thereafter, for each affected process, observations shall be conducted every third year.

C. Upon written request by the Illinois EPA, such observation shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received the request or on such later date agreed to by the Illinois EPA.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

iii. A. For each set of observations required by Conditions 7.4.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.4.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and identify the observer's current employer. This report shall also include the following for each observation:

A. Identification of the affected process for which observations were conducted.

B. Date and time of observations.

C. Description of observation condition, including recent weather.

D. Description of the operating conditions of the affected processes.

E. Raw data.

F. Opacity determinations.

G. Conclusions.

7.4.8 Inspection Requirements

a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.4.6(a). [Sections 39.5(7)(a) and (d) of the Act].

i. Affected processes other than loadout operations shall be inspected on at least a monthly basis.

ii. Affected loadout operations shall be inspected on at least a weekly basis.

iii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.

iv. The records required by Condition 7.4.9(d) for these inspections shall be signed off by supervisory or management personnel.

b. As part of the inspections of Condition 7.4.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.4.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.4.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that each affected process that is in routine service shall be observed at least once during each calendar year in which it is operating other than loadout operations which shall each be observed at least once during each calendar quarter in which it is operating [Sections 39.5(7)(b) and (d) of the Act].

c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.4.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.4.8(b), such observations are not subject to the notice requirements of Condition 7.4.7(a)(iii) through (v) [Sections 39.5(7)(b) and (d) of the Act].

7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected processes, pursuant to Sections 39.5(7)(a) and (e) of the Act:

a. Maximum operating capacity of each affected process (tons/hr).

b. i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.4.6(a)(i).

A. The type of emission unit (pneumatic transfer system, silos, loadouts, etc.) and the Permittee’s designation for each emission unit with a description of the emission points on the emission unit;

B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and

C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and

whether they would take the place of or supplement the primary control measures.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.4.9(b)(i) are sufficient to assure compliance with Condition 7.4.4(c) at the maximum process weight rate at which each affected process can be operated (tons fly ash/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.4.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

iii. Any revisions after the effective date of this permit to the record required by Condition 7.4.9(b)(i) related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

c. Pursuant to Construction Permit #07110031, the Permittee shall maintain the following operating records for the fly ash handling system:

i. Total amount of fly ash handled (tons/month and tons/year) [T1].

ii. Records of PM emissions (tons/month and tons/year), with supporting calculations [T1].

d. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8:

i. Date and time the inspection was performed, name(s) of inspection personnel, and specific process(es) inspected.

ii. The observed condition of the control measures identified in the record required by Condition 7.4.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of fly ash in the vicinity of the process.

iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.4.9(b)(i) that is recommended as a result of the inspection and associated work order number(s).

iv. A description of any corrective action taken if visible emissions were observed including whether corrective action

took place within 2 hours of the observation and whether the status of the process returned to no visible emission.

e. The Permittee shall maintain records of the following for each incident when any affected process operated without the control measures specified by the record in Condition 7.4.9(b)(i) and each incident when an affected process continued to operate during malfunction or breakdown with excess emissions or excess opacity as addressed by Condition 7.4.3(b):

i. The date of the incident and identification of the affected process(es) that was involved.

ii. A description of the incident, including the control measure(s) that was not present or operated as required by the record identified in Condition 7.4.9(b)(i); other control measures or mitigation measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation of whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.4.4.

iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.

iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the record required by Condition 7.4.9(b)(i) were in place or the processes were shut down (to resume operation only after these control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measures required pursuant to the record required by Condition 7.4.9(b)(i) and the estimated amount of fly ash handled during the incident.

vi. A discussion of the probable cause of the incident and any preventative measures taken.

f. The Permittee shall keep a maintenance and repair record for each item of air pollution control equipment, i.e., each dust suppressant application system, associated with affected processes. This record shall list the date and nature of maintenance and repair activities performed on the control measures identified in the record required by Condition 7.4.9(b)(i). (See also Condition 9.6.1, Control Equipment Maintenance Records.)

g. The Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.4.7 (Opacity Observations Requirements), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.4.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.4.8(b).

7.4.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

i. For those breakdown or malfunction PM and opacity events that require notification and reporting pursuant to Condition 7.4.10(b)(i), notification and reporting shall be provided pursuant to Condition 7.4.10(b)(i) rather than 7.4.10(a).

ii. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.4.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.4.9(e).

iii. A. Except for events and incidents for which notification or reporting is required by Condition 7.4.10(a)(ii) or 7.4.10(b)(i), as referenced in 7.4.10(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.4.10(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of affected process(es) continued with excess emissions or excess opacity during malfunction or breakdown as addressed by Condition 7.4.3(b).

i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected process exceeds 30 percent for eight or more 6-minute averaging periods within a two hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.4.10(b)(ii).)

B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days, providing a copy of the records for the incident required by Condition 7.4.9(e).

ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected processes continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

A. A listing of such incidents, in chronological order, that includes:

I. The date, time, and duration of each incident,

II. The identity of the affected process(es) involved in the incident, and

III. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.4.10(b)(i)(B), with the date of the notice.

B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.

C. The sum duration of all incidents during the quarter.

D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Operation of additional dust control measures.

b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the measures being replaced, as recognized in a Construction Permit for such measures.

7.4.12 Compliance Procedures

a. Compliance with Conditions 7.4.4 is addressed by the observations, inspections, and recordkeeping required by Conditions 7.4.7(a), 7.4.8, and 7.4.9, respectively.

b. Compliance with Condition 7.4.6 is addressed by the inspections and recordkeeping required by Conditions 7.4.8, and 7.4.9, respectively.

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

## 7.5 Limestone and Gypsum Handling Equipment

### 7.5.1 Description

The Permittee operates a limestone handling system that is used for unloading, storage and transfer of limestone and three wet ball mills for limestone preparation. The Permittee also operates a wet sluiced system for gypsum produced by the WFGD system that is routed to the plant gypsum pond. Associated particulate matter (PM) emissions are controlled by various control measures such as enclosures and covers.

Note: The description in Condition 7.5.1 is for informational purposes only and implies no limits or constraints.

### 7.5.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the limestone and gypsum handling equipment and associated emission control systems at the source:

| Emission Unit Description | Emission Control Equipment |
|---|---|
| Limestone Handling System | Enclosures, Covers and Dust Suppressant Delivery System |
| Gypsum Handling System | None |

### 7.5.3 Applicability Provisions

a. An "affected process" for the purpose of these unit-specific conditions is an individual process emission unit that handles limestone and gypsum as described in Conditions 7.5.1 and 7.5.2.

b. Certain affected processes (specifically, limestone day bins, wet ball mills and limestone conveyors) for which construction, modification, or reconstruction, commenced after August 31, 1983 are also "affected facilities" for purposes of the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart OOO, pursuant to 40 CFR 60.670(a)(1). These affected facilities are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart OOO and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

### 7.5.4 Applicable Emission Standards

a. Pursuant to the NSPS, 40 CFR 60.672(b) and (d), fugitive emissions of PM, as defined by 40 CFR 60.671, from the affected facilities are subject to the following limits:

   i. The opacity of emissions from ball mills, screens, any transfer point on a belt conveyor, storage bins, and enclosed truck loading operations (except truck dumping into a screening operation, feed hopper, or crusher, if material were to be dumped directly into an affected facility by truck) shall not exceed 10 percent [40 CFR 60.672(b) and (d)].

ii. Truck dumping directly into any screening operation, feed hopper, or crusher is exempt from the above standards [40 CFR 60.672(d)].

b. Pursuant to the NSPS, 40 CFR 60.672(e)(2) and Table 2 to 40 CFR Part 60 Subpart OOO, the bin vents must meet the stack emission limit of no more than 7 percent opacity for control devices on individual enclosed storage bins.

c. The affected processes shall comply with 35 IAC 212.321(a): "no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of [35 IAC 212.321]." Each unit, i.e. each grinding mill, limestone belt conveyor, storage bin or feed hopper, shall demonstrate compliance individually (see also Attachment 1) [35 IAC 212.321(a)].

d. The standard that addresses fugitive emissions, as defined by 35 IAC 211.2490, of the affected processes is set forth in Condition 5.2.2(a).

e. The standard that addresses the opacity of the emission of smoke or other particulate matter from the affected processes is set forth in Condition 5.2.2(b). This standard applies to all of the affected processes, including those that are subject to the NSPS, 40 CFR 60 Subpart OOO.

7.5.5 Non-Applicability of Regulations of Concern

a. The emission units that handle gypsum are not subject to the NSPS, 40 CFR 60 Subpart OOO because the Permittee does not crush or grind gypsum, so that the Permittee does not operate a nonmetallic mineral processing plant, as defined by 40 CFR 60.671, for gypsum.

b. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

c. The affected limestone handling processes that are not subject to the NSPS, 40 CFR 60 Subpart OOO, include truck dumping into the outdoor limestone storage pile, bulldozers pushing limestone to the reclaim feeders, and the reclaim feeders.

d. The affected limestone handling processes that are not subject to the applicable stack PM concentration limit (and associated performance testing) in Table 2 to 40 CFR 60 Subpart OOO, include the bin vent filters.

7.5.6 Work Practices, Operational and Production Limits, and Emission Limitations

a. i. The Permittee shall implement and maintain the control measures for the affected operations, such as enclosures, covers, and application of dust suppressant, for emissions of particulate matter to support periodic monitoring for the applicable requirements in Condition 7.5.4, pursuant to Section 39.5(7)(a) of the Act.

ii. The control measures implemented and maintained shall be identified and operated in conformance with the record required by Condition 7.5.9(b)(1) to satisfy Condition 7.5.6(a)(i).

b. Pursuant to Construction Permit #06090019,

i. The limestone and gypsum handling systems shall be operated with the following control practices:

A. Enclosures shall be maintained in good condition and dust suppressant shall be applied, as needed, whenever material is being moved past a point of application [T1].

B. The limestone pile reclaim shall be maintained and operated to minimize dust emissions, including localized application of suppressant to material being reclaimed as needed to control visible emissions during reclaiming [T1].

C. The gypsum produced by the WFGD process shall be wet sluiced to the gypsum pond [T1].

ii. The amount of limestone received at the source shall not exceed 515,000 tons per year [T1].

iii. A. Particulate matter ($PM/PM_{10}$) emissions from the limestone handling system shall be controlled with the following measures and shall not exceed the following limits [T1].

| Operations | Control Measures | Nominal Control Efficiency (Percent) | PM Emissions (Tons/Yr) | $PM_{10}$ Emissions (Tons/Yr) |
|---|---|---|---|---|
| Receiving & Conveyor Transfer Points | -- | -- | 0.770 | 0.280 |
| Storage Pile Activity & Wind Erosion | Wet Dust Suppression | 75 | 6.610 | 2.810 |
| Other Limestone Handling | Enclosure, Wet Suppression & Filters | 75* | 1.175 | 0.974 |
| | | Total | 8.555 | 4.064 |

* Nominal control efficiency of 95 percent for storage silos and bins controlled with filters.

B. Bin vent filters shall have a design outlet loading for particulate matter of no more than 0.005 grains/scf, as shown by the manufacturer's performance specifications for the device or representative emission test data for similar filter devices [T1].

iv. Gypsum shall only be wet sluiced, i.e., this permit does not authorize thermal drying of the gypsum [T1].

v. PM and $PM_{10}$ emissions from truck traffic associated with transport of limestone shall not exceed 11.14 and 2.769 tons/year, respectively [T1].

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

v. Maintenance and repair of enclosures, suppressant devices and other control devices shall be performed to assure that such devices are functioning properly when material is being handled [T1].

c. At all times, the Permittee shall maintain and operate affected facilities that are subject to NSPS, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to 40 CFR 60.11(d).

7.5.7 Opacity and Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected process, observations shall be conducted not later than two years of the effectiveness of this condition.

B. Thereafter, for each affected process, observations shall be conducted every third year.

C. Upon written request by the Illinois EPA, such observation shall be conducted for specific affected process(es) not later than 45 calendar days after the Permittee has received of the request or on such later date agreed to by the Illinois EPA.

ii. A. The duration of opacity observations (for affected processes subject to the NSPS, 40 CFR 60 Subpart OOO,)

for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 5.0 percent.

B. The duration of opacity observations (for affected processes not subject to the NSPS, 40 CFR 60 Subpart OOO,) for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are each not greater than 10.0 percent.

C. The Permittee shall conduct observations of opacity in accordance with the applicable requirements of 40 CFR 60.675 and 40 CFR 60.8.

iii. A. For each set of observations required by Conditions 7.5.7(a)(i)(A), (B), and (C), the Permittee shall notify the Illinois EPA at least 7 days in advance of the date of the first observation(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the date of the first observation(s).

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of the observation(s), if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for these observations not later than 30 days after the date of completion of each set of opacity observations required by Conditions 7.5.7(a)(i)(A), (B), and (C). The report shall include a copy of the current Reference Method 9 certification of each observer and identify the observer's current employer. This report shall also include the following for each observation:

A. Identification of the affected process for which observations were conducted.

B. Date and time of observations.

C. Description of observation condition, including recent weather.

D. Description of the operating conditions of the affected processes.

E. Raw data.

F. Opacity determinations.

G. Conclusions.

7.5.8 Inspection Requirements

a. The Permittee shall perform inspections as follows to confirm compliance with the requirements of Condition 7.5.6(a) [Sections 39.5(7)(a) and (d) of the Act].

   i. Inspections of the material handling equipment including the enclosure and any suppressant application devices shall be conducted at least once per month when the unit is in operation.

   ii. If an affected process is not in operation during an inspection, this shall be noted in the inspection record.

   iii. The records required by Condition 7.5.9(d) for these inspections shall be signed off by supervisory or management personnel.

b. As part of the inspections of Condition 7.5.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with 35 IAC 212.107 to demonstrate compliance with the requirements of Condition 7.5.4(b), unless the Permittee elects to perform Reference Method 9 observations in accordance with Condition 7.5.7(a). These observations may be scheduled so that only a number of affected processes are reviewed during each inspection, provided, however, that all affected processes that are in routine service shall be observed at least once during each calendar year in which it is operating [Sections 39.5(7)(b) and (d) of the Act].

c. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the process to no visible emission or shall conduct observations of opacity by Reference Method 9 within one week in accordance with Condition 7.5.7(a). If the Permittee performs Reference Method 9 observations under this Condition 7.5.8(b), such observations are not subject to the notice requirements of Condition 7.5.7(a)(iii) through (v) [Sections 39.5(7)(b) and (d) of the Act].

7.5.9 Recordkeeping Requirements

a. The Permittee shall maintain records of the following for the affected processes, pursuant to Sections 39.5(7)(a) and (e) of the Act:

   i. The maximum operating capacity of each affected process (tons/hr).

   ii. Manufacturer/vendor or Permittee developed operating and maintenance procedures.

b. Pursuant to Section 39.5(7)(a) of the Act:

   i. The Permittee shall maintain a record, which shall be kept up to date to reflect any changes that the Permittee may elect

to make, that contains the following for each affected process for which a control measure(s) must be implemented and maintained pursuant to Condition 7.5.6(a)(i).

A. The type of emission unit (grinding mills, screening, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;

B. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous; and

C. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the control measures identified in the record required by Condition 7.5.9(b)(i) are sufficient to assure compliance with Conditions 7.5.4(b) and (v) at the maximum process weight rate at which each affected process can be operated (tons limestone/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. This demonstration shall include the information addressed by Condition 7.5.9(a), emission factors for uncontrolled PM emissions, and/or controlled PM emissions published by USEPA or other credible sources.

iii. A copy of the record required by Condition 7.5.9(b)(i) shall be submitted to the Illinois EPA not later than 60 days after the effectiveness of Condition 7.5.9(b)(i). Any subsequent revisions to this record related to control measures or affected processes, including their method of operation, shall be submitted not later than 30 days after the date of the revision. Upon request by the Illinois EPA, the Permittee shall submit other relevant information related to the control measures.

c. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain operating records for the following items:

i. Total amount of limestone received, tons/month and tons/year, by rail and by truck.

ii. Amount of limestone stacked out to each storage pile, tons, on a monthly basis.

iii. Amount of limestone handled by the transfer and conveying system, tons/month and tons/year.

d. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain records of the following for the inspections required by Condition 7.5.8:

i. Date and time the inspection was performed, name(s) of inspection personnel, and specific process(s) inspected.

ii. The observed condition of the control measures identified in the record required by Condition 7.5.9(b)(i) for each inspected affected process, including the presence of any visible emissions or atypical accumulations of limestone fines in the vicinity of the process.

iii. A description of any maintenance or repair of equipment associated with control measures identified in the record required by Condition 7.5.9(b)(i) that is recommended as a result of the inspection and associated work order number(s).

iv. A description of any corrective action taken if visible emissions were observed including whether corrective action took place within 2 hours of the observation and whether the status of the process returned to no visible emission.

e. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall maintain records of the following for each incident when any affected process operated without the control measures specified by the record in Condition 7.5.9(b)(i):

i. The date of the incident and identification of the affected process(es) that was involved.

ii. A description of the incident, including the control measure(s) that was not present or operated as required by the records identified in Condition 7.5.9(b)(i); other control measures or mitigation measures that were operated, if any; the measures taken to minimize and correct deficiencies with chronology; and an explanation of whether the emissions or opacity during the incident exceeded any applicable emission or opacity standard, as listed in Condition 7.5.4.

iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.

iv. The length of time after the incident was identified that the affected processes continued to operate before the control measures identified in the records required by Condition 7.5.9(b)(i) were in place or the processes were shut down (to resume operation only after these control measures were in place); an explanation of why continued operation was necessary; and, if this time was more than one hour, an

explanation of why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

v. The estimated total duration of the incident, i.e., the total length of time that the affected processes ran without the control measures required pursuant to the record required by Condition 7.5.9(b)(i) and the estimated amount of limestone handled during the incident.

vi. A discussion of the probable cause of the incident and any preventative measures taken.

f. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep a maintenance and repair record for each item of air pollution control equipment, i.e., each dust suppressant application system, associated with affected processes. This record shall list the date and nature of maintenance and repair activities performed on the control measures identified in the record required by Condition 7.5.9(b)(i). (See also Condition 9.6.1, Control Equipment Maintenance Records.)

g. Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall keep records for all opacity observations made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the formal report for the observations if conducted pursuant to Condition 7.5.7 (Opacity Observations Requirements), or otherwise the identity of the observer, a description of the observations that were made, the operating condition of the affected process(es), the observed opacity, copies of the raw data sheets for the observations, and the reason for the opacity observations, e.g., Reference Method 9 opacity observations required by Condition 7.5.7(a)(i), written request by the Illinois EPA, or any required Reference Method 9 opacity observations following observations of visible emissions under Condition 7.5.8(b).

h. Pursuant to Construction Permit #06090019, the Permittee shall keep the following records:

i. Records for the implementation of fugitive dust control measures on roadways used by trucks that handle limestone [T1].

ii. The Permittee shall keep the following records related to PM and $PM_{10}$ emissions (tons/month and tons/year) with supporting calculations:

A. PM and $PM_{10}$ Emissions from different limestone handling operations [T1].

B. PM and $PM_{10}$ emissions from truck traffic associated with handling limestone [T1].

iii. The Permittee shall maintain a file containing documentation for the emission guarantee for each filter device, in gr/dscf, provided by the supplier of the device [T1].

7.5.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected processes, as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

i. Within 30 days after the conclusion of an incident in which the Permittee continued to operate an affected process for more than 12 operating hours after discovering that emission control measures required by the record identified in Condition 7.5.9(b)(i) were not present or operating, the Permittee shall submit written notice to the Illinois EPA. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.5.9(e).

ii. A. Except for events and incidents for which notification or reporting is required by Condition 7.5.10(a)(i), all other notifications shall be submitted with the quarterly reports that are submitted for the coal-fired boilers pursuant to Condition 7.1.10-2(a).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Operation of additional dust control measures.

b. Operation of replacement dust control measures that are of equal or greater effectiveness in controlling visible emissions than the

measures being replaced, as recognized in a Construction Permit for such measures.

7.5.12 Compliance Procedures

a. Compliance with Condition 7.5.4 is addressed by the work practices, observations, inspections, and recordkeeping required by Conditions 7.5.6, 7.5.7, 7.5.8, and 7.5.9, respectively.

b. Compliance with Condition 7.5.6 is addressed by the inspections and recordkeeping required by Conditions 7.5.8, and 7.5.9, respectively.

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

## 7.6 Auxiliary Boiler

### 7.6.1 Description

The boiler is a fuel combustion emission unit used to produce steam for auxiliary support, to provide heat, and to assist as needed with startups of boilers CB-1 and CB-2. The boiler was constructed in 1992 and has a nominal capacity of 226 mmBtu/hr heat input. The boiler is not used to directly generate electricity. The boiler is fired with distillate fuel oil.

Note: The description in Condition 7.6.1 is for informational purposes only and implies no limits or constraints.

### 7.6.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Control Equipment |
|---|---|---|
| Boiler CB-AUX4 | Auxiliary Boiler Oil Fired | None |

### 7.6.3 Applicability Provisions

a. i. The "affected boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 7.6.1 and 7.6.2.

ii. Because the construction of the boiler commenced after June 19, 1984 and the affected boiler has a heat input capacity greater than 100 mmBtu/hr, the affected boiler is also an affected facility under the federal NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Db. As an affected facility, the Permittee must comply with applicable requirements of the NSPS, 40 CFR 60 Subpart Db, and related requirements of 40 CFR 60, Subpart A, General Provisions, for the affected boiler.

iii. Because the boiler is located at, or is part of, a major source of HAP, the affected boiler is also an affected source under the federal NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD. As an affected source, the Permittee must comply with applicable requirements of the NESHAP, 40 CFR Part 63, Subpart DDDDD, and related requirements of 40 CFR 63, Subpart A, General Provisions, for the affected boiler.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards in Condition 7.6.4(b) (35 IAC 212.206), and Condition 7.6.4(d) (35 IAC 216.121) during startup. This

authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "…to minimize startup emissions, duration of individual startups and frequency of startups."

i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.

ii. The Permittee shall conduct startup of the affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.6.9(a), (c), and (d) and 7.6.10-2(a)(iii).

iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected boiler in violation of the applicable requirements of Condition 7.6.4(b) (35 IAC 212.206), and 7.6.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of the affected boiler. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.6.9(a), (c) and (e), 7.6.10-2(a)(iv) and (b), and 7.6.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.6.4 Applicable Emission Standards

a. i. The affected boiler is subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Db.

A. Opacity from the affected boiler shall not exceed 20 percent, as measured on a 6-minute average, except for one 6-minute period per hour of not more than 27 percent pursuant to NSPS, 40 CFR 60.43b(f).

B. Pursuant to 40 CFR 60.43b(g), the above opacity limitations do not apply during startup, malfunction, and shutdown, as defined by 40 CFR 60.2. Notwithstanding this provision, exceedances of these limitations during startup, malfunction, and shutdown are still subject to recordkeeping and reporting requirements under the NSPS.

ii. The additional standard that addresses the opacity of the emission of smoke or other particulate matter from the affected boiler is set forth in Condition 5.2.2(b).

b. The emissions of PM from the affected boiler attributable to burning of oil shall not exceed 0.10 lb/mmBtu of actual heat input in any one-hour period [35 IAC 212.206].

c. i. Prior to January 1, 2017*, the emissions of $SO_2$ from the affected boiler attributable to firing of oil shall not exceed 0.3 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 214.122(b) (State-Only Requirement).

* - On and after January 1, 2017, the affected boiler is subject to work practices limiting oil sulfur content and additional recordkeeping requirements as specified in Conditions 7.6.6 and 7.6.9, below.

ii. The emissions of $SO_2$ from the affected boiler shall not exceed 0.5 lb/mmBtu actual heat input on a 30-day rolling average, if the boiler combusts oil other than very low sulfur oil, pursuant to 40 CFR 60.42b(d) and (e).

d. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

7.6.5 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected boiler not being subject to the $NO_x$ limits of 40 CFR 60.44b(a) pursuant to 40 CFR 60.44b(k), which excludes a new boiler from such limits if it has a heat input capacity of 250 mmBtu/hr or less, fires only gas and oil, and is limited to an overall annual capacity factor of 10 percent or less.

b. The affected boiler is not subject to the PM limits under 40 CFR 60.43b because such limits only apply to new oil fired boilers that use add-on technology, as defined in 40 CFR 60.41b for control of $SO_2$ emissions, as provided by 40 CFR 60.43b(b).

c. This permit is issued based on the affected boiler not being subject to the $NO_x$ limit of 35 IAC 217.121, because the maximum design heat input capacity of the boiler is less than 250 mmBtu/hr.

d. This permit is issued based on the Permittee not being subject to the continuous $SO_2$ monitoring requirements of 40 CFR 60.47b(a) for the affected boiler because the Permittee obtains and maintains fuel receipts as described in 40 CFR 60.49b(r), pursuant to 40 CFR 60.47b(f).

e. This permit is issued based on the affected boiler not being subject to the federal Acid Rain program because the boiler is not an electric utility unit as it does not supply steam to an electric generator. (Refer to 40 CFR 72.2 and 72.6.)

f. Pursuant to 40 CFR 63.7575, the affected boiler meets the definition of a "limited-use boiler" because it has a federally enforceable average annual capacity factor limitation of no more than 10 percent (See Condition 7.6.6(b)(ii). Therefore, pursuant to 40 CFR 63.7500, it is not subject to the emission limits in Tables 1 and 2 or 11 through 13 in 40 CFR 63, Subpart DDDDD, or the

energy assessment requirements in Table 3 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD.

g. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for $SO_2$, PM, CO, and $NO_x$ because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard, pursuant to 40 CFR 64.2(a)(2).

7.6.6 Work Practices, Operational and Production Limits and Emission Limitations

a. i. Pursuant to Section 39.5(7) of the Act, Ultra low sulfur liquid fuel, as defined in 40 CFR 63.7575, shall be the only fuel fired in the affected boiler.

Note: Pursuant to 40 CFR 60.41b and 60.49b(r), if oil contains nitrogen content greater than 0.05 weight percent, oil is generally considered residual oil for purposes of the NSPS. However, if oil has sulfur content less than 0.5 percent by weight, the state and federal definitions of distillate oil are similar and nitrogen content records are not required to distinguish between distillate and residual oil.

ii. Pursuant to 35 IAC 214.121(b)(2)(B), on and after January 1, 2017, the sulfur content of all distillate fuel oil used by the affected boiler shall not exceed 15 ppm (State-Only Requirement).

iii. At all times, the Permittee shall maintain and operate the affected boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required pursuant to the NSPS, 40 CFR 60.11(d).

b. i. The emissions of the affected boiler shall not exceed the following limitations. Compliance with these annual limitations shall be determined from a running total of 12 months of data, that is, from the sum of the data for each month plus the preceding 11 months (12 month total) [T1].

| | Limits | |
|---|---|---|
| Pollutant | (Lbs/Hr) | (Tons/Yr) |
| PM | 22.2 | 9.7 |
| $SO_2$ | 66.6 | 29.2 |
| $NO_x$ | 66.6 | 29.2 |

ii. Operation of the boiler shall not exceed an annual capacity factor of 10.0 percent based on heat input as defined in 40 CFR 60.41b [T1].

Note: The above limitations were established in Permit #91080029. These limitations ensure that the affected boiler does not constitute a major modification pursuant to the federal PSD rules and exclude the affected boiler from the NSPS limit for $NO_x$.

Pursuant to 40 CFR 60.41b, annual capacity factor is defined as the ratio between the actual heat input to the affected boiler during a calendar year and the potential heat input to the affected boiler had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.

c. The following requirements related to the affected boiler are imposed because the Permittee is relying on the provisions of 40 CFR 60.42b(j) to exclude the boiler from the NSPS limit for $SO_2$:

   i. Fuel Oil combusted in the affected boiler shall have a sulfur content of no more than 0.5 percent by weight, so as to qualify as very low sulfur oil as defined in 40 CFR 60.41b.

7.6.7 Emissions Testing Requirements

a. The Permittee shall have the CO, PM and $NO_x$ emissions of the affected boiler measured during representative operating conditions, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

   i. A. Measurements shall be conducted by the end of the second full calendar year of operation after the effective date of this Condition 7.6.7(a); and

      B. Measurements shall be conducted within 90 days of a written request from the Illinois EPA.

   ii. A. Testing shall be conducted using appropriate USEPA Reference Test Methods, including Methods 5, 10 and 7 or 19 for PM, CO and $NO_x$ emissions, respectively.

      B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.

   iii. The Permittee shall submit a test plan to the Illinois EPA at least 60 days prior to testing, which plan shall include the information specified by Condition 8.6.2.

   iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the

Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:

A. A summary of results.

B. Detailed description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

C. Detailed description of the operating conditions of the affected boiler during testing, including fuel consumption (gal/hr), firing rate (mmBtu/hr), and combustion system information, i.e., settings for distribution of combustion air, and levels of $O_2$ in the flue gas, as determined by diagnostic measurements.

D. Detailed data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

E. Opacity data (6-minute average and hourly average) monitored during emission testing.

7.6.8 Monitoring Requirements

a. Continuous Opacity Monitoring

Pursuant to 40 CFR 60.48b(a) and (e) and Section 39.5(7)(d) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boiler.

b. Boiler Tune-Ups

Pursuant to 40 CFR 63.7500(c), the affected boiler shall complete a tune-up every 5 years as specified in 40 CFR 63.7540.

7.6.9 Recordkeeping Requirements

a. Operational Records for the Affected Boiler

Pursuant to Sections 39.5(7)(a) and (e) of the Act, 40 CFR 60 Subpart A and 40 CFR Part 63, Subpart DDDDD, the Permittee shall maintain the following operational records and fuel oil records for the affected boiler:

i. Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative [40 CFR 60.7(b)].

ii. Records of the results of a tune-up required by Condition 7.6.8(b), including the information as specified by 40 CFR 63.7540(a)(10)(vi)(A) through (C).

iii. Records identifying any deviation from the fuel restriction in Condition 7.6.6(a)(i).

iv. Pursuant to 35 IAC 214.121(b)(2)(C), on and after January 1, 2017, records demonstrating that the fuel oil used by the affected boiler complies with the requirements in Condition 7.6.6(a)(ii), such as records from the fuel supplier indicating the sulfur content of the fuel oil. The Permittee shall provide copies of the records to the Illinois EPA not later than 30 days after receipt of a request by the Illinois EPA. (State-Only Requirement)

v. Records of the following information for each operating day, pursuant to 40 CFR 60.49b(p) and 40 CFR 63.7555(d)(3),

A. Fuel use records for the days the boiler was operating that include the following:

I. Calendar date.

II. The number of hours of operation.

III. A record of the hourly steam load.

IV. Fuel usage in terms of gal/mo and gal/yr.

b. Records for Continuous Opacity Monitoring

Pursuant to Section 39.5(7)(e) of the Act, and the NSPS, 40 CFR 60.48b, the Permittee shall maintain records for the opacity monitoring system on the affected boiler required by Condition 7.6.8(a) that shall include the following:

i. Operating records for the opacity monitoring system, including:

A. Opacity measurements (6-minute, one-hour and three-hour block averages).

B. Performance testing measurements and evaluations, calibration checks, and other quality assurance/control activities.

C. Maintenance and adjustment performed.

D. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.

E. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Conditions 7.6.10(a) and (c).

ii. Records to address compliance with Condition 7.6.4(a) including:

A. Each 6-minute period when the opacity was above either of the limitations in Condition 7.6.4(a) with date, time, whether it occurred during startup, malfunction, or shutdown, and further explanation of the incident.

c. Records for Startups of Affected Boiler, pursuant to Section 39.5(7)(b) of the Act:

i. The Permittee shall maintain written startup procedures for the affected boiler as required by Condition 7.6.3(b)(ii).

ii. The Permittee shall maintain the following records related to startups of the affected boiler:

A. For all startups of the affected boiler.

I. Date, time, and duration of the startup.

II. A description of the startup, the reason(s) for the startup, and an indication of whether or not written startup procedures were followed. If any procedures were not followed, the records shall include any departures from those procedures and the reason those procedures could not be followed.

C. If this elapsed time is more than 120 minutes or if the Permittee's startup procedures were not followed:

I. A detailed explanation why startup was not completed sooner or the procedures were not followed.

II. Documentation for the procedures that were followed.

III. An explanation of whether PM or CO emissions during startup exceeded an applicable standard, as listed in Condition 7.6.4, or the Permittee believes that compliance with that standard during startup likely was not maintained.

d. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boiler:

i. Maintenance and repair records for the affected boiler that address aspects or components of the boiler for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, and reason for the activity.

ii. Records for each incident when operation of the affected boiler continued with excess emissions during malfunction or breakdown, as addressed by Condition 7.6.3(c), shall include the following information:

A. Date, time, duration (i.e., the length of time during which operation continued with excess emissions until corrective actions were taken or the boiler was taken out of service), and a description of the incident.

B. The corrective actions used to reduce the quantity of PM or CO emissions and to reduce the duration of the incident.

C. Confirmation of fulfillment of the requirements of Condition 7.6.10-3(a), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.6.10-3(a)(ii).

D. If emissions of PM or CO exceeded an applicable standard, as listed in Condition 7.6.4, or the Permittee believes that compliance with the standard likely was not maintained:

I. A detailed explanation why continued operation of the affected boiler was necessary.

II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures.

e. The following records to demonstrate compliance with limitations in Conditions 7.6.6 addressing the capacity factor of the affected boiler.

i. A file containing the rated capacity of the boiler, with supporting documentation.

ii. The actual annual capacity factor (percent) of the boiler, as defined by 40 CFR 60.41b, determined for each calendar year, with supporting calculations.

f. The following records to demonstrate compliance with limitations in Conditions 7.6.6 addressing the emissions of $SO_2$, PM, and $NO_x$ from the affected boiler.

i. A. Identification of any period of time when the sulfur content of the oil being burned in the boiler was more than 0.15 lb/mmBtu (so that the $SO_2$ emissions were greater than allowed by Condition 7.6.4(c)), with starting date, end date, explanation for the incident, and the estimated usage of oil and the actual $SO_2$ emission rate(s) during the period, with supporting documentation and calculations.

B. Identification of each hour in the above period of time when the $SO_2$ emission rate of the boiler, in lb/hr, was more than the limit in Condition 7.6.6(b)(i), or alternatively, confirmation that this limit was not exceeded during this period, with supporting documentation and calculations.

C. Confirmation that the sulfur content of all oil burned in the boiler during the above period of time was within 0.25 lb/mmBtu, so as to constitute very low sulfur oil as defined in 40 CFR 60.41b, or alternatively, identification of each day covered by the above period when very low sulfur oil was not burned in the boiler, with further explanation and the 30-day rolling average $SO_2$ emission rate of the boiler associated with such day, in lb/mmBtu, with supporting documentation and calculations.

ii. A. The additional emissions of $SO_2$ (lb $SO_2$) associated with each period of time when the sulfur content of oil burned in the boiler was more than 0.15 lb/mmBtu, with supporting calculations.

B. I. The standard emission factors for PM, and $NO_x$ used by the Permittee for the boiler, with their basis or supporting documentation.

II. Identification of any hour or longer period of time when such emission factor may not have fully accounted for the emissions of the boiler, with explanation and an estimate of the additional emissions (lb) associated with such period of time, with supporting documentation and calculations.

III. Identification of each hour in such period of time when the PM and $NO_x$ emission rate of the boiler, in lb/hr, was more than the limit in Condition

7.6.6(b)(i), or alternatively, confirmation that those limits were not exceeded during this period, with supporting documentation.

C. The emissions of $SO_2$, PM, and $NO_x$ from the boiler (tons/mo and tons/yr), based on records for fuel usage and other required records, with supporting calculations.

7.6.10-1 Reporting Requirements – Reporting of Deviations

a. For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as specified below. These notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the probable cause of such deviations, any corrective actions and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

i. For those breakdown and malfunction PM or CO events that require notification and reporting pursuant to Condition 7.6.10-3(a), notification and reporting pursuant to Condition 7.6.10-3(a) rather than 7.6.10-2(b).

ii. Notification with the quarterly reports required by Condition 7.6.10-2(d) for deviations from Conditions 7.6.4(b) and (d) unless notification and reporting for that deviation is required pursuant to Condition 7.6.10-3(a).

iii. Notification with the quarterly reports required by Condition 7.6.10-2(a) for deviations from other applicable emission standards, work practice requirements, and recordkeeping requirements.

iv. The Permittee shall notify the Illinois EPA within 30 days after discovery of deviations from the fuel oil sulfur requirements of Condition 7.6.6(a)(ii). (State-Only Requirement)

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.6.10-2(a) shall include the following information for the affected boiler related to deviations from permit requirements during the quarter [Sections 39.5(7)(f)(i) of the Act].

i. A listing of all notifications and reports for instances of deviations that have been reported in writing to the Illinois EPA pursuant to Condition 7.6.10-3(a). For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.

ii. Detailed information, as required by Conditions 7.6.10-1(a)(ii) or (iii), for all other deviations not addressed in the above listing.

7.6.10-2 Reporting Requirements - Periodic Reporting

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

i. These reports shall include the following information for operation of the affected boiler during the quarter:

A. The total operating hours for the affected boiler.

B. Annual capacity factor over the previous 12 months for the affected boiler and, only if residual oil was fired, average fuel nitrogen content during the reporting period, pursuant to 40 CFR 60.49b(q).

C. Certification that the only oil that was combusted in the affected boiler during the reporting period was ultra low sulfur liquid fuel meeting the definition of 40 CFR 63.7575.

D. A discussion of significant changes in the fuel supply to the affected boiler, if any.

ii. These reports shall include the information for opacity from the affected boiler during the quarter and the associated continuous opacity monitoring system specified by Condition 7.6.10-2(b).

iii. These reports shall include the following information related to startups of the affected boiler during the quarter:

A. A listing of each startup, including date, description and duration, accompanied by a copy of the records maintained pursuant to Condition 7.6.9(c)(ii)(A) for each startup for which such records were required.

B. If there have been no startups of the affected boiler during the quarter, this shall be stated in the report.

iv. These reports shall be submitted after the end of every calendar quarter as follows:

| Monitoring Period | Submittal Deadline |
|---|---|
| January - March | May 15 |
| April - June | August 15 |

| | |
|---|---|
| July - September | November 15 |
| October - December | February 15 |

b. Reporting of Opacity

Pursuant to Sections 39.5(7)(a) and (f) of the Act and the NSPS, 40 CFR 60.49b(h), the Permittee shall report the following information for the affected boiler to the Illinois EPA with its quarterly operating report pursuant to Condition 7.6.10-2(a):

i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" specified by 40 CFR 60.7(d). When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).

ii. If the total duration of excess opacity during the calendar quarter is 1 percent or greater of the total operating time for an affected boiler during the quarter or if the opacity monitoring system downtime was more than 5 percent of the total operating time for an affected boiler during the quarter then, in addition to the "Summary Report" required by Condition 7.6.10-2(b)(i) and the information required by Condition 7.6.10-2(b)(iii), the quarterly report must include:

A. The total operating time of the affected boiler; and

B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.

iii. The following information for each period when opacity was in excess of the applicable standard specified in Condition 7.6.4(a)(i).

A. A summary of information for each period of excess opacity that includes:

I. The starting date and time of the excess opacity.

II. The duration of the excess opacity.

III. The magnitude of excess opacity, based on six-minute average opacity, including:

a. The percent opacity for each six-minute period in excess of the standard.

b. The start and stop time of each six-minute period in excess of the standard.

IV. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.

V. Any corrective actions taken.

VI. Identification of any previous report for the incidents during the quarter submitted to the Illinois EPA pursuant to Condition 7.6.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

VII. Information required by Conditions 7.6.9(i)(ii)(A), (B), and (D)(I) for incidents when operation of an affected boiler continued during malfunction or breakdown with excess opacity that are not addressed by individual reports submitted pursuant to Condition 7.6.10-3(a)(ii).

c. Boiler Tune-Up Reporting

Pursuant to 40 CFR 63.7550, the Permittee shall submit a compliance report including the information required in 40 CFR 63.7550(c)(1) every 5 years according to the requirements in 40 CFR 63.7550(b).

7.6.10-3 Reporting Requirements - Notifications

a. Reporting when Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, for incidents when operation of the affected boiler continued with excess emissions during malfunction or breakdown as addressed by Condition 7.6.3(c). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of the affected boiler.

i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail for each incident in which the opacity from the affected boiler exceeds 20 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 20 percent for not more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.6.10-2(b).

ii. Upon conclusion of each incident in which the applicable PM emission standard was exceeded or in which an exceedance of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days, providing a copy of the records for the incident required by Condition 7.6.9(d)(ii)(A), (B) and (D).

7.6.11 Compliance Procedures

a. Compliance with the opacity standard of Condition 7.6.4(a)(iii) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.6.8(a) and the recordkeeping requirements of Condition 7.6.9.

b. Compliance with the PM limit of Conditions 7.6.4(b) and the PM limitation of Condition 7.6.6(b)(i) is addressed by the work practices, testing and recordkeeping required by Conditions 7.6.6(a), 7.6.7(a), and 7.6.9, respectively.

c. Compliance with the $SO_2$ limit of Condition 7.6.4(c) and the $SO_2$ limitation of Condition 7.6.6(b)(i) is addressed by the recordkeeping required by Condition 7.6.9.

d. Compliance with the CO emission limit of Condition 7.5.4(d) is addressed by the work practices, emission testing, and recordkeeping required by Conditions 7.6.6(a)(ii), 7.6.7(a) and 7.6.9.

e. Compliance with $NO_x$ emission limitation of Condition 7.6.6(b)(i) is addressed by the testing and recordkeeping required by Conditions 7.6.7(a) and 7.6.9, respectively.

f. Compliance with the operating restrictions of Condition 7.6.6(a)(i), (b)(ii) and (c) is addressed by the recordkeeping required by Condition 7.6.9.

Note: Condition 7.6.12 is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

## 7.7 WFGD Emergency Diesel Generator

### 7.7.1 Description

The WFGD Emergency Diesel Generator is a 1.6 MWe Reciprocating Internal Combustion Engine (RICE) used to produce electricity to protect the two wet flue gas desulfurization systems on the two generating units from damage during loss of station electrical power to these systems. The generator has a June 2000 construction date and is fueled with diesel fuel.

Note: The description in Condition 7.7.1 is for informational purposes only and implies no limits or constraints.

### 7.7.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Control Equipment |
|---|---|---|
| WFGD Emergency Generator | Emergency Diesel Generator | None |

### 7.7.3 Applicability Provisions

a. The "affected engine" for the purpose of these unit-specific conditions is the diesel engine powering the emergency generator described in Conditions 7.7.1 and 7.7.2.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected engine in violation of the applicable standards identified or cross-referenced in Condition 7.7.4(a) (35 IAC 212.123(a)) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "…to minimize startup emissions, duration of individual startups and frequency of startups."

i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.

ii. The Permittee shall conduct startup of the affected engine in accordance with the manufacturer's or Permittee's written procedures prepared by the Permittee and maintained in the control room for the affected engine, that are specifically developed to minimize emissions from startups.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.7.9(a).

iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of the affected engine in violation of the applicable standards identified or cross-referenced in Condition 7.7.4(a) (35 IAC 212.123(a)) in the event of a malfunction or breakdown of the affected engine. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent of injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable repair the affected engine, remove the affected engine from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.7.9(b). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected engine out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess

emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.7.4 Applicable Emission Standards

a. The applicable requirements for the opacity of the emission of smoke or other particulate matter from the affected engine are set forth in Condition 5.2.2(b).

b. Pursuant to 35 IAC 214.305, on and after January 1, 2017, the sulfur content of all distillate fuel oil used by the affected engine shall not exceed 15 ppm. (State-Only Requirement)

7.7.5 Non-Applicability of Regulations of Concern

a. The affected engine is not subject to the NSPS for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII. This is based on the information provided in the permit application, which indicates that this emergency diesel engine generator was constructed in June 2000 at AmerenCilco Hallock power station and was moved to this site (prior to promulgation date of this NSPS, July 11, 2005). Also the relocation to Coffeen did not entail reconstruction or reconditioning pursuant to 40 CFR 60.14.

b. The affected engine is not being used for generating electricity for sale but only as an emergency generator, so that the affected engine is not a qualifying "Utility Unit" under 40 CFR 72.2.

c. The affected engine is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for $SO_2$, PM, CO, and $NO_x$ because the affected engine does not use an add-on control device to achieve compliance with an emission limitation or standard.

d. The associated fuel oil storage tank is exempt from permit requirements, pursuant to 35 IAC 201.146.

e. Pursuant to 40 CFR 63.6590(b)(3)(iii), the affected engine does not have to meet the requirements of 40 CFR Part 63 Subpart A or Subpart ZZZZ (RICE NESHAP), including initial notification requirements, because the engine is an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate and is not contractually obligated to be available for an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3, or for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

7.7.6 Work Practices, Operational and Production Limitations, and Emission Limitations

a. Pursuant to Construction Permit #07120051,

i. On a calendar year basis, the sulfur content of fuel fired in the affected engine shall not exceed 0.28 percent by weight [T1].

ii. The annual consumption of fuel by the affected engine shall not exceed 201,380 gallons. Compliance with this limitation shall be determined on a monthly basis from a running total of 12 months of data [T1].

iii. Hourly and annual* emissions of nitrogen oxides ($NO_x$), carbon monoxide (CO), sulfur dioxide ($SO_2$), volatile organic material (VOM) and particulate matter (PM) from the affected engine shall not exceed the following limits. The annual limits are based on the hourly emission rates and consumption of 201,380 gallons of fuel (equivalent to 1,844 hours of operation per year) [T1].

| | $NO_x$ | CO | $SO_2$ | VOM | PM |
|---|---|---|---|---|---|
| Hourly (Lbs/Hour) | 34.70 | 42.75 | 4.23 | 5.03 | 2.01 |
| Annual (Tons/Year) | 31.99 | 39.40 | 3.90 | 4.64 | 1.85 |

* Compliance with annual limits shall be determined from a running total of 12 months of data [T1].

7.7.7 Opacity Monitoring Requirements

Pursuant to Sections 39.5(7)(b) and (d) of the Act, at a minimum, the Permittee shall perform observations for opacity on the affected engine in accordance with Method 9 at least once every calendar year, or no later than 30 days after being operated if the affected engine is not operated during a given calendar year. The duration of opacity observations for each test shall be at least 12 minutes (two 6-minute averages).

7.7.8 Recordkeeping Requirements

a. Pursuant to 39.5(7)(b) and (d) of the Act, the Permittee shall maintain a file that contains:

i. The manufacturer's specifications for the hourly fuel consumption of the affected engine.

ii. Documentation for the age of the affected engine, i.e., the date the affected engine was manufactured or subsequently reconstructed.

iii. The hourly emission rates and emission factors (e.g., pounds/gallon) used by the Permittee for the normal operation of the affected engine, with supporting documentation.

iv. Inspection/maintenance repair records for the affected engine.

v. Operating records for the affected engine that include the following:

A. I. Records for each shipment of fuel oil received: the amount, maximum sulfur content, and supplier.

II. Pursuant to 35 IAC 214.121(b)(2)(C), on and after January 1, 2017, records demonstrating that the fuel oil used by the affected engine complies with the requirements in Condition 7.7.6(b), such as records from the fuel supplier indicating the sulfur content of the fuel oil. The Permittee shall provide copies of the records to the Illinois EPA not later than 30 days after receipt of a request by the Illinois EPA. (State-Only Requirements)

B. The sulfur content of the fuel oil supply to the affected engine. For this purpose, sulfur content shall be based on the weighted average of material in the storage tank, or the sulfur content of the supply shall be assumed to be the highest sulfur content of any shipment in the tank.

C. Monthly and annual records of fuel consumption by the affected engine (gallons/month and gallons/year).

b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall keep records for all opacity measurements made in accordance with Method 9. These records shall include: date and time the observation was performed, name(s) of observing personnel, identification of which equipment was observed, whether or not the equipment was running properly, and the findings of the observation including the opacity values obtained from the Method 9 observation.

c. Records for Continued Operation During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected engine:

i. Maintenance and repair records for the affected engine that address aspects or components of the affected engine for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, and reason for the activity.

ii. Records for each incident when operation of the affected engine continued with excess emissions during malfunction or breakdown, as addressed by Condition 7.7.3(c), shall include the following information:

A. Date, time, duration (i.e., the length of time during which operation continued with excess emissions until corrective actions were taken or the affected engine was taken out of service), and description of the incident.

B. The corrective actions used to reduce the opacity of emissions and to reduce the duration of the incident.

C. Confirmation of fulfillment of the requirements of Condition 7.7.9(b), as applicable, including copies of any follow-up reports submitted pursuant to Condition 7.7.9(b)(ii).

7.7.9 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA of deviations from permit requirements for the affected operations, as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken, and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act.

i. For those breakdown or malfunction opacity events that require notification and reporting pursuant to Condition 7.7.9(b)(i), notification and reporting shall be provided pursuant to Condition 7.7.9(b)(i) rather than 7.7.9(a).

ii. A. Except for events and incidents for which notification or reporting is required by Condition 7.7.9(a)(ii) or 7.7.9(b)(i), as referenced in 7.7.9(a)(i), all other notifications shall be submitted with the quarterly reports required by Condition 7.7.9(b)(ii).

B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in prior notifications and reports for such deviations.

iii. On and after January 1, 2017, the Permittee shall notify the Illinois EPA within 30 days after discovery of deviations from the fuel oil sulfur requirements of Condition 7.7.6(b). (State-Only Requirement)

b. Reporting When Continued Operation Occurred During Malfunctions and Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA for incidents when operation of

affected operation(s) continued with excess emissions or excess opacity during malfunction and breakdown as addressed by Condition 7.7.3(c).

i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone, facsimile or electronic mail, for each incident in which the opacity from an affected operation exceeds 30 percent for eight or more 6-minute averaging periods within a two-hour period unless the Permittee has begun the shutdown by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods within a two-hour period, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.7.9(b)(ii).)

B. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a copy of the records for the incident required by Condition 7.7.8(e).

ii. The Permittee shall submit quarterly reports to the Illinois EPA that include the following information for incidents during the quarter in which affected operations continued to operate during malfunction or breakdown with excess emissions or excess opacity. These reports shall be submitted with the quarterly reports submitted for the coal-fired boiler pursuant to Condition 7.1.10-2(a).

A. A listing of such incidents, in chronological order, that includes:

I. The date, time, and duration of each incident; and

II. Whether a follow-up notice was submitted for the incident pursuant to Condition 7.7.9(b)(i)(B), with the date of the notice.

B. A description of the incident, discussion of probable cause of the incident, corrective actions taken, and any preventative measures taken; provided, however, that the Permittee need not resubmit information provided in a prior report for an incident, as identified above, but may elect to supplement the prior submittal.

C. The sum duration of all incidents during the quarter.

D. If there have been no such incidents during the calendar quarter, this shall be stated in the report.

7.7.10 Compliance Procedures

a. Compliance with the opacity standard of Condition 7.7.4(a) is addressed by the opacity observations made in accordance with the requirements of Condition 7.7.7 and the recordkeeping requirements of Condition 7.7.8.

b. Compliance with the PM limit of Condition 7.7.6(a)(iii) is addressed by the work practices required by Conditions 7.7.6(a)(i) and (ii) and the recordkeeping required by Condition 7.7.8.

c. Compliance with the $SO_2$ limit of Condition 7.7.6(a)(iii) is addressed by the recordkeeping required by Condition 7.7.8.

d. Compliance with the CO emission limit of Condition 7.7.6(a)(iii) is addressed by the work practices required by Conditions 7.7.6(a)(i) and (ii) and the recordkeeping required by Condition 7.7.8.

e. Compliance with the $NO_x$ emission limitation of Condition 7.7.6(a)(iii) is addressed by the recordkeeping required by Condition 7.7.8.

f. Compliance with the VOM emission limit of Condition 7.7.6(a)(iii) is addressed by the recordkeeping required by Condition 7.7.8.

g. Compliance with the distillate fuel oil sulfur content limitation of Condition 7.7.4(b) is addressed by the recordkeeping required by Condition 7.7.8.

Note: Condition 7.7.10 is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act

## 7.8 Gasoline Storage Tank

### 7.8.1 Description

The 1,000 gallon capacity storage tank with submerged loading pipe is associated with gasoline non-retail dispensing operations for plant vehicles and equipment.

Note: The description in Condition 7.8.1 is for informational purposes only and implies no limits or constraints.

### 7.8.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|---|---|---|
| Storage Tank – CGT-1 | Gasoline Storage Tank with Submerged Loading Pipe | None |

### 7.8.3 Applicability Provisions

An "affected storage tank" for the purpose of these unit-specific conditions is the storage tank described in Conditions 7.8.1 and 7.8.2.

### 7.8.4 Applicable Emission Standards

a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:

   i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, or satisfies one of several other compliance options as specified in 35 IAC 215.122(b).

      Note: The exception to this standard at 35 IAC 215.122(c) is not applicable because the vapor pressure of gasoline is greater than 17.24 kPa (2.5 psia) at 294.3°K (70°F).

   ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

### 7.8.5 Non-Applicability of Regulations of Concern

a. The affected storage tank is not 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 capacity of the tank is less than 40 cubic meters (10,566 gallons).

b. The affected storage tank is not subject to the National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities, 40 CFR Part 63, Subpart CCCCCC,

because the gasoline storage tank is not located at an Area Source for Hazardous Air Pollutants.

c. The affected storage tank is not subject to 35 IAC 215.121 or 215.122(a) because the capacity of the affected storage tank is less than 40,000 gallons.

d. The requirements of 35 IAC 215.583(a)(2) do not apply to transfer of gasoline to the affected storage tank because the affected storage tank is located in Montgomery County [35 IAC 215.583(b)].

e. The affected gasoline storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources because the storage tank does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.8.6 Work Practices, Operational and Production Limits, and Emission Limitations

The affected storage tank shall be equipped and operated with a submerged loading pipe or an equivalent device approved by the Illinois EPA, pursuant to 35 IAC 215.122(b) and 215.583(a). (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)

7.8.7 Inspection Requirements

Not later than May 1 of each calendar year, the Permittee shall conduct an inspection of the affected storage tank and its physical condition and ability to comply with the applicable equipment requirements of Conditions 7.8.6, pursuant to Sections 39.5(7)(a) and (d) of the Act.

7.8.8 Recordkeeping Requirements

The Permittee shall maintain records of the following for the affected storage tank, pursuant to Sections 39.5(7)(a) and (e) of the Act:

a. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.

b. Operating records for the affected tank that, at a minimum, shall include the following:

i. Information documenting performance of the inspections that are required by Condition 7.8.7, including date and description of the inspection, confirmation of the adequacy of the specific features of the tank required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.

ii. Information identifying deviations from applicable equipment requirements, with a detailed description and explanation.

c. Maintenance and repair records for the affected storage tank, as related to the repair or replacement of the loading pipe.

d. Records for each shipment of material loaded into the affected storage tank, including type of material and amount.

e. Throughput of material, gal/mo and gal/yr, by type of material.

7.8.9 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

a. The Permittee shall submit written notice to the Illinois EPA within 30 days after any filling of an affected storage tank that was not in compliance with the requirements of Conditions 7.8.4 or 7.8.6, i.e., that was conducted without a submerged loading pipe.

b. The Permittee shall notify the Illinois EPA through the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for deviations from applicable recordkeeping requirements.

7.8.10 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational changes with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for any activity constituting construction or modification as defined in 35 IAC 201.102.

a. Changes to components related to the submerged loading pipe, including addition of new components and repair and replacement of components.

b. Changes in the material stored in the affected storage tank.

7.8.11 Compliance Procedures

a. Compliance with Condition 7.8.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.8.6 and by the inspections and recordkeeping required by Conditions 7.8.7 and 7.8.8, respectively.

b. Compliance with Condition 7.8.6 is addressed by the inspections and the recordkeeping required by Conditions 7.8.7 and 7.8.8, respectively.

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

# 8.0 GENERAL PERMIT CONDITIONS

## 8.1 Permit Shield

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

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

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.1 of this permit. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

## 8.3 Emissions Trading Programs

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

## 8.4 Operational Flexibility/Anticipated Operating Scenarios

### 8.4.1 Changes Specifically Addressed by Permit

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

### 8.4.2 Changes Requiring Prior Notification

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

a. The changes do not violate applicable requirements;

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

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

## 8.5 Testing Procedures

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

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

| Monitoring Period | Report Due Date |
|---|---|
| January - June | September 1 |
| July - December | March 1 |

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

8.6.2 Test Notifications

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

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

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

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

OR

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (#40)
1021 North Grand Avenue East
Springfield, Illinois 62702

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
412 SW Washington Street, Suite D
Peoria, Illinois 61602

iii. USEPA Region 5 - Air Branch

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

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

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

OR

Illinois Environmental Protection Agency
Division of Air Pollution Control
Air Permit Section (MC 11)
1021 North Grand Avenue East
Springfield, Illinois 62702

8.7 Title I Conditions

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

# 9.0 STANDARD PERMIT CONDITIONS

## 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

## 9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

a. Enter upon the Permittee's premises where the emission unit(s) are located, or emissions related activity is conducted or where records must be kept under the conditions of this permit.

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

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

d. Sample or monitor any substances or parameters at any location:

   i. As authorized by the Clean Air Act, at reasonable times, for the purposes of assuring compliance with this CAAPP permit or applicable requirements; or

   ii. As otherwise authorized by the CAA or the Act;

e. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

## 9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. Fees shall be paid by check sent to one of the following two addresses:

Illinois Environmental Protection Agency
Fiscal Services Section
1021 North Grand Avenue East
Springfield, IL 62702

OR

Illinois Environmental Protection Agency
Fiscal Services Section
P.O. Box 19276
Springfield, IL 62794-9276

## 9.5 Property Rights

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

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

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

### 9.6.2 Records of Changes in Operation

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

### 9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit including any records, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to: (1) the Illinois EPA, Air Compliance Section, and (2) the Illinois EPA, Air Regional Field Office. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating records, or other relevant evidence:

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

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

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

## 9.11 Permanent Shutdown

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

## 9.12 Reopening and Reissuing Permit for Cause

### 9.12.1 Permit Actions

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

### 9.12.2 Reopening and Revision

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

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

9.14 Permit Expiration and Renewal

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

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal

application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

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

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

# 10.0 ATTACHMENTS

## 10.1 Attachment 1 - Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

where

P = Process weight rate; and
E = Allowable emission rate; and,

1) Up to process weight rates of 408 MG/hr (450 T/hr):

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

2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

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

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

| Metric | | English | |
|---|---|---|---|
| P | E | P | E |
| Mg/hr | kg/hr | T/hr | lb/hr |
| 0.05 | 0.25 | 0.05 | 0.55 |
| 0.1 | 0.29 | 0.10 | 0.77 |
| 0.2 | 0.42 | 0.20 | 1.10 |
| 0.3 | 0.64 | 0.30 | 1.35 |
| 0.4 | 0.74 | 0.40 | 1.58 |
| 0.5 | 0.84 | 0.50 | 1.75 |
| 0.7 | 1.00 | 0.75 | 2.40 |
| 0.9 | 1.15 | 1.00 | 2.60 |
| 1.8 | 1.66 | 2.00 | 3.70 |
| 2.7 | 2.1 | 3.00 | 4.60 |
| 3.6 | 2.4 | 4.00 | 5.35 |
| 4.5 | 2.7 | 5.00 | 6.00 |
| 9. | 3.9 | 10.00 | 8.70 |
| 13. | 4.8 | 15.00 | 10.80 |
| 18. | 5.7 | 20.00 | 12.50 |
| 23. | 6.5 | 25.00 | 14.00 |
| 27. | 7.1 | 30.00 | 15.60 |
| 32. | 7.7 | 35.00 | 17.00 |
| 36. | 8.2 | 40.00 | 18.20 |
| 41. | 8.8 | 45.00 | 19.20 |
| 45. | 9.3 | 50.00 | 20.50 |
| 90. | 13.4 | 100.00 | 29.50 |
| 140. | 17.0 | 150.00 | 37.00 |
| 180. | 19.4 | 200.00 | 43.00 |
| 230. | 22. | 250.00 | 48.50 |
| 270. | 24. | 300.00 | 53.00 |
| 320. | 26. | 350.00 | 58.00 |
| 360. | 28. | 400.00 | 62.00 |
| 408. | 30.1 | 450.00 | 66.00 |
| 454. | 30.4 | 500.00 | 67.00 |

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

## 10.2 Attachment 2 - Emissions of Particulate Matter from Existing Process Emission Units

35 IAC 212.322 - Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.

b) Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

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

where:

P = Process weight rate; and
E = Allowable emission rate; and,

1) Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 1.985 | 4.10 |
| B | 0.67 | 0.67 |
| C | 0 | 0 |

2) For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 25.21 | 55.0 |
| B | 0.11 | 0.11 |
| C | -18.4 | -40.0 |

c) Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

| Metric | | English | |
|---|---|---|---|
| P | E | P | E |
| Mg/hr | kg/hr | T/hr | lb/hr |
| 0.05 | 0.27 | 0.05 | 0.55 |
| 0.1 | 0.42 | 0.10 | 0.87 |
| 0.2 | 0.68 | 0.20 | 1.40 |
| 0.3 | 0.89 | 0.30 | 1.83 |
| 0.4 | 1.07 | 0.40 | 2.22 |
| 0.5 | 1.25 | 0.50 | 2.58 |
| 0.7 | 1.56 | 0.75 | 3.38 |
| 0.9 | 1.85 | 1.00 | 4.10 |
| 1.8 | 2.9 | 2.00 | 6.52 |
| 2.7 | 3.9 | 3.00 | 8.56 |
| 3.6 | 4.7 | 4.00 | 10.40 |
| 4.5 | 5.4 | 5.00 | 12.00 |
| 9. | 8.7 | 10.00 | 19.20 |
| 13. | 11.1 | 15.00 | 25.20 |
| 18. | 13.8 | 20.00 | 30.50 |
| 23. | 16.2 | 25.00 | 35.40 |
| 27.2 | 18.15 | 30.00 | 40.00 |
| 32.0 | 18.8 | 35.00 | 41.30 |
| 36.0 | 19.3 | 40.00 | 42.50 |
| 41.0 | 19.8 | 45.00 | 43.60 |
| 45.0 | 20.2 | 50.00 | 44.60 |
| 90.0 | 23.2 | 100.00 | 51.20 |
| 140.0 | 25.3 | 150.00 | 55.40 |
| 180.0 | 26.5 | 200.00 | 58.60 |
| 230.0 | 27.7 | 250.00 | 61.00 |
| 270.0 | 28.5 | 300.00 | 63.10 |
| 320.0 | 29.4 | 350.00 | 64.90 |
| 360.0 | 30.0 | 400.00 | 66.20 |
| 400.0 | 30.6 | 450.00 | 67.70 |
| 454.0 | 31.3 | 500.00 | 69.00 |

where:

P = Process weight rate in Mg/hr or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

## 10.3 Attachment 3 - Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

## 10.4 Attachment 4 - Guidance

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

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

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

www.epa.state.il.us/air/caapp/index.html

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

Application For A Construction Permit Form (CAAPP Form-199):

www.epa.state.il.us/air/caapp/199-caapp.pdf

## 10.5 Attachment 5 - Acid Rain Program Permit

217-785-1705

**ACID RAIN PROGRAM PERMIT**

Illinois Power Generating Company
Attn: Rick Diericx
1500 Eastport Plaza Drive
Collinsville, Illinois 62234

Oris No.: 861
IEPA I.D. No.: 135803AAA
Source/Unit: Coffeen Power Station/ Units 1 and 2
Date Received: October 28, 2015
Date Issued: TBD
Effective Date: January 1, 2016
Expiration Date: September 20, 2017

**STATEMENT OF BASIS:**

In accordance with Section 39.5(17) if the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program Permit, including requested revisions, to Illinois Power Generating Company for its Coffeen Power Station.

**SULFUR DIOXIDE ($SO_2$) ALLOCATIONS AND NITROGEN OXIDES ($NO_x$) LIMITS FOR EACH AFFECTED UNIT:**

| | | |
|---|---|---|
| UNIT 1 (CB-1) | $SO_2$ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73* | Years 2010 and Beyond |
| | | 5,094 |
| | $NO_x$ Limit | 0.86 lb/mmBtu |

***** Also includes return of repowering deduction of 2 allowances, which were returned by USEPA on October 30, 2000.

| | | |
|---|---|---|
| UNIT 2 (CB-2) | $SO_2$ Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73* | Years 2010 and Beyond |
| | | 15,406 |
| | $NO_x$ Limit | 0.86 lb/mmBtu |

* Also includes return of repowering deduction of 5 allowances, which were returned by USEPA on October 30, 2000.

**PERMIT APPLICATION:** The permit application, including the $NO_x$ Compliance Plan, is attached and incorporated as part of this permit. The Permittee must comply with the standard requirements and special provisions set forth in the application.

**COMMENTS, NOTES, AND JUSTIFICATIONS:** This permit contains provisions related to $SO_2$ emissions and requires the Permittee to hold $SO_2$ allowances under the federal Acid Rain Program to account for $SO_2$ emissions from the affected units. An allowance is a limited authorization to emit up to one ton of $SO_2$ during or after a specified calendar year. The transfer of allowances to and from a unit account does not necessitate a revision to the unit $SO_2$ allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to $NO_x$ emissions requiring the affected units to comply with applicable emission limitations for $NO_x$ under the Acid Rain Program. In addition to the described $NO_x$ compliance plan, the affected units shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a $NO_x$ compliance plan and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart V, and 35 Ill. Adm. Code Part 226, which addresses $NO_x$ emissions from Coffeen Units 1 and 2.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217-785-1705.

Raymond E. Pilapil
Acting Manager, Permits Section
Division of Air Pollution Control

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

# Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☒ Revised ☐ for ARP permit renewal

**STEP 1**

Identify the facility name, State, and plant (ORIS) code.

| Facility (Source) Name | State | Plant Code |
|---|---|---|
| Coffeen | Illinois | 861 |

**STEP 2**

Enter the unit ID# for every affected unit at the affected source in column "a."

| a | b |
|---|---|
| Unit ID# | Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1) |
| 01 | Yes |
| 02 | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |

EPA Form 7610-16 (Revised 7-2014)

Facility (Source) Name (from STEP 1) Coffeen



**STEP 3**

Read the standard requirements.

## Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

## Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

## Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1) Coffeen



**Sulfur Dioxide Requirements, Cont'd.**

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**Nitrogen Oxides Requirements**

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

Facility (Source) Name (from STEP 1) Coffeen

of a new certificate of representation changing the designated representative;

STEP 3, Cont'd. **Recordkeeping and Reporting Requirements, Cont'd.**

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

Facility (Source) Name (from STEP 1) Coffeen

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

**Effect on Other Authorities, Cont'd.**

to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a source can hold; *provided,* that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the certification statement, sign, and date.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name Randy O'Keefe | |
| Signature Randy O'Keefe | Date 10/22/15 |

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

# Acid Rain $NO_X$ Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 2

**STEP 1**
Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

| Plant Name | State | Plant Code |
|---|---|---|
| Coffeen | IL | 861 |

**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

| | ID# 01 | ID# 02 | ID# | ID# | ID# | ID# |
|---|---|---|---|---|---|---|
| | Type CY | Type CY | Type | Type | Type | Type |
| (a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers) | | | | | | |
| (b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers) | | | | | | |
| (c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers) | | | | | | |
| (d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers) | | | | | | |
| (e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers) | | | | | | |
| (f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers) | X | X | | | | |
| (g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers) | | | | | | |
| (h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers) | | | | | | |

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STEP 2, cont'd

Coffeen
Plant Name (From Step 1)

| | ID# | ID# | ID# | ID# | ID# | ID# |
|---|---|---|---|---|---|---|
| | Type | Type | Type | Type | Type | Type |
| (i) $NO_x$ Averaging Plan (include $NO_x$ Averaging form) | | | | | | |
| (j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack) | | | | | | |
| (k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with $NO_x$ Averaging (check the $NO_x$ Averaging Plan box and include $NO_x$ Averaging Form) ) | | | | | | |
| (l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2) | | | | | | |

STEP 3: Identify the first calendar year in which this plan will apply.

January 1, 2016

STEP 4: Read the special provisions and certification, enter the name of the designated representative, sign and date.

## Special Provisions

General. This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

## Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

| | |
|---|---|
| Name Randy O'Keefe | |
| Signature Randy O'Keefe | Date 10/22/15 |

EPA Form 7610-28 (Revised 7-2014)