

# ***Statement of Basis***

for the DRAFT CAAPP Permit for:

## **Source Name:**

**ANR Pipeline Company, Woodstock Compressor Station**

Statement of Basis No.: 95090251-1110

I.D. No.: 111816AAA

Permit No.: 95090251

Date Prepared: March 26, 2013

## **Permitting Authority:**

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

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## **PREFACE**

### **Reason For This Document**

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

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

### **Purpose Of This Document**

The purpose of this Statement of Basis is to provide discussion regarding this Draft Significant Modification and changes from the source's most recently issued CAAPP permit. This document would also provide the permitting authority, the public, the source, and the USEPA with the applicability and technical matters that form the basis of the Draft Significant Modification.

The permit modifications addressed by this permitting action are those deemed to warrant review as significant modifications under Section 39.5(14)(c) of the Act. These modifications, which are described in detail in Chapter IV below, primarily involve the applicability of certain legal requirements and reasonable changes to periodic monitoring requirements. As provided by the Act, the CAAPP's procedures for significant modification must be used "for applications requesting significant modifications and for those applications that do not qualify as either minor modifications or as administrative permit amendments". As relevant here, a permit modification that purports to be a "significant change in existing monitoring" or a "relaxation of reporting or recordkeeping requirements" is considered "significant". Sections 39.5(14)(c)(i) and (ii) of the Act.

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

This source's CAAPP renewal was issued on February 14, 2012. On June 04, 2012 the source submitted a Significant Modification Request, addressing a few administrative issues, as well as, some changes to periodic monitoring for two different types of emission units regulated in the February 14, 2012 CAAPP permit.

### **Limitations**

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

This document does not purport to establish policy or guidance.

## INTRODUCTION

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

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

As a draft significant modification to a CAAPP permit, this permitting action is subject to requirements for public participation and a 45-day review by USEPA in accordance with Sections 39.5(8)(a) and (9) of the Act. The conditions that are the subject of this draft significant modification and open for comment are discussed in Chapter IV below.

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

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

## **CHAPTER I - LEGAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS**

### **1.1 Legal Basis for Program**

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

### **1.2 Legal Basis for Issuance of CAAPP Permit**

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

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

#### **a. Application Status**

The Illinois EPA issued the source's most recent CAAPP permit on February 14, 2012. The source is currently operating under the terms of this permit. This Draft CAAPP Permit resultant from a Significant Modification request, addresses application content and necessary revisions to meet the requirements for issuance of the permit.

#### **b. Present Compliance Status**

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

#### **c. Payment of Fees**

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

**d. Additional Information**

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

**1.3 Legal Basis for Conditions in the CAAPP Permit**

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

**a. Applicable Federal Regulations**

This source operates emission units that are subject to the following Federal regulations.

- 40 CFR Part 63 - Subpart ZZZZ Stationary Reciprocating Internal Combustion Engines
- 40 CFR Part 63 - Subpart DDDDD Industrial, Commercial and Institutional Boilers and Process Heaters
- 40 CFR Part 60 - Subpart GG, Standards of Performance for Stationary Gas Turbines

**b. Applicable SIP Regulations**

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

- 35 IAC Part 201 - Permits And General Provisions
- 35 IAC Part 212 - Visible And Particulate Matter Emissions
- 35 IAC Part 214 - Sulfur Limitations
- 35 IAC Part 215 - Organic Material Emission Standards And Limitations
- 35 IAC Part 216 - Carbon Monoxide Emissions
- 35 IAC Part 217 - Nitrogen Oxides Emissions
- 35 IAC Part 244 - Episodes
- 35 IAC Part 254 - Annual Emissions Report

**c. Other Applicable Requirements**

There are no other applicable requirements for this source.

## **CHAPTER II - FACTUAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS**

### **2.1 Source History**

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

### **2.2 Description of Source**

SIC Code: 4922  
County: McHenry

The source utilizes compressors driven by natural gas fired engines and gas fired turbines for the transmission of natural gas through pipelines. The primary sources of pollutants at this source are the natural gas fired engines and natural gas fired turbines.

The source contains the following processes:

<i>Emission Units</i>	<i>Description</i>
Natural Gas Fired Engines	The natural gas fired engines power compressor units that move natural gas through natural gas pipelines.
Natural Gas Fired Turbines	The natural gas fired turbines power compressor units that move natural gas through natural gas pipelines.
Gasoline Storage Tank	The source operates a gasoline tank for dispensing.

### **2.3 Single Source Status**

This source does not have any collocated facilities that would be considered a single source with this facility based on information found in the certified application.

### **2.4 Ambient Air Quality Status for the Area**

The source is located in an area that is currently designated nonattainment for the National Ambient Air Quality Standards for ozone and attainment or unclassifiable for all other criteria pollutants. (See 40 CFR Part 81 - Designation of Areas for Air Quality Planning Purposes)

### **2.5 Source Status**

The source requires a CAAPP permit because this source is considered major (based on its PTE) for the following regulated pollutants: nitrogen oxides (NO<sub>x</sub>) volatile organic material (VOM), hazardous air pollutants (HAP).

This source is considered a natural minor for the following regulated pollutants: PM<sub>10</sub>, PM<sub>2.5</sub> and sulfur dioxide (SO<sub>2</sub>).

### **2.6 Annual Emissions**

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

<i>Pollutant</i>	<i>2010</i>	<i>2009</i>	<i>2008</i>
CO	45.45	31.39	38.45
NO <sub>x</sub>	198.63	110.51	160.77
PM	4.26	3.33	3.51
SO <sub>2</sub>	0.080	0.07	0.09
VOM	18.95	12.37	15.62
CO <sub>2E</sub>	13,148.63	11,820.40	12,044.66
HAP (total)	---	---	---

## 2.7 Fee Schedule

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

<i>Pollutant</i>	<i>Tons/Year</i>
Volatile Organic Material (VOM)	69.81
Sulfur Dioxide (SO <sub>2</sub> )	4.21
Particulate Matter (PM)	15.66
Nitrogen Oxides (NO <sub>x</sub> )	320.45
HAP, not included in VOM or (HAP)	0.0
Total	410.13

## 2.8 SIP Permit Facts (T1 Limits)

CAAPP Permits must address all "applicable requirements," which includes the terms and conditions of preconstruction permits issued under regulations approved by USEPA in accordance with Title I of the CAA (See definition of applicable requirements in Section 39.5(1) of the Illinois Environmental Protection Act). Preconstruction permits, commonly referred to in Illinois as Construction Permits, derive from the New Source Review ("NSR") permit programs required by Title I of the CAA. These programs include the two major NSR permit programs: (1) the Prevention of Significant Deterioration ("PSD") program<sup>1</sup> and (2) the nonattainment NSR program.<sup>2</sup> These programs also encompass state construction permit programs for projects that are not major.

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

- There are no previously issued Construction Permits required to be incorporated into the CAAPP Permit.

- The Illinois EPA has not recently issued Construction Permits for this source.
- There are no newly issued Construction Permits for projects not yet constructed for this source.
- The Illinois EPA has not established any T1R or T1N Limits in this Draft CAAPP permit.
- There are no extraneous or obsolete T1 conditions for the source.

**CHAPTER III - SUPPLEMENTAL DISCUSSIONS REGARDING THE PERMIT**

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

**3.1 Environmental Justice Discussions**

This location has not been identified as a potential concern for Environmental Justice consideration.

**3.2 Emission Testing Results**

No emission testing has been required at this source.

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

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

**3.4 Field Inspection Results**

A review of the source’s latest field inspection report demonstrates the source’s ability to comply with all applicable requirements.

**3.5 Historical Non-Compliance**

There is no historical non-compliance for this source.

**3.6 Emission Unit Justifications and Rational**

<b>a. Natural Gas Fired Engines</b>		
<b>Applicable Requirements Summary</b>		
<b>Applicable Requirement</b>	<b>Type</b>	<b>Location</b>
NO <sub>x</sub> Requirement 35 IAC 217.386(a)(1)	Applicable Standard	See the Permit, Condition 4.1.2(c)

**Nitrogen Oxides Emissions**

Changes to the Periodic Monitoring Compliance Method are as follows:

- ✓ Monitoring
  - o Perform annual Method ASTM D6522-00 monitoring instead of Method 7E pursuant to 35 IAC 217.394(d)(1). (Condition 4.1.2(c)(ii)(A))
  - o Delete non-applicable reference to 35 IAC 217.394(b)(1). (Previous Condition 4.1.2(c)(ii)(D))

**Rationale and Justification for Periodic Monitoring**

The changes above do not compromise Periodic Monitoring because its frequency and quality are not altered.

<b>b. Turbines (T-11 and T-12)</b>		
<b>Applicable Requirements Summary</b>		
Applicable Requirement	Type	Location
NO <sub>x</sub> Requirement (NSPS Subpart A and GG)	Applicable Standard	See the Permit, Condition 4.2.2(c)(i)(A)
NO <sub>x</sub> Requirement 35 IAC 217.386(a)(1)	Applicable Standard	See the Permit, Condition 4.2.2(c)(i)(B)

There is a change in the NSPS NO<sub>x</sub> standard section. Since the source requested that the monitoring of the nitrogen content of fuel (40 CFR 60.334(h)(2)) be removed, the NO<sub>x</sub> emission allowance (F) in the standard needs to be zero in order to be compliant with the regulation. This change is in the Draft/Proposed CAAPP permit Condition 4.2.2(c)(i)(A).

### Nitrogen Oxides Emissions

Changes to the Periodic Monitoring Compliance Method are as follows:

- ✓ Monitoring
  - o Perform annual Method ASTM D6522-00 monitoring instead of Method 7E pursuant to 35 IAC 217.394(d)(1).(Condition 4.2.2(c)(ii)(A))
  - o Delete non-applicable reference to 35 IAC 217.394(b)(1). (Previous Condition 4.2.2(c)(ii)(D))
  - o Delete NSPS monitoring for nitrogen content of fuel (Previous Condition 4.2.2(c)(ii)(A))
- ✓ Recordkeeping
  - o Change in numbering of Condition 4.2.2(c)(ii)(G) through (I) to (H) through (J).

### Rationale and Justification for Periodic Monitoring

The changes above do not compromise Periodic Monitoring because its frequency and quality are not altered.

<b>c. Turbines (T-10)</b>		
<b>Applicable Requirements Summary</b>		
Applicable Requirement	Type	Location
NO <sub>x</sub> Requirement (NSPS Subpart A and GG)	Applicable Standard	See the Permit, Condition 4.3.2(c)(i)(A)
NO <sub>x</sub> Requirement 35 IAC 217.386(a)(1)	Applicable Standard	See the Permit, Condition 4.3.2(c)(i)(B)
NO <sub>x</sub> Limitation	Applicable Limitation	See the Permit, Condition 4.3.2(c)(i)(C) and (D)
Operational and Production	Applicable Limitation	See the Permit, Condition 4.3.2(f)(i)(A), (B) and (C)

There are changes in the NSPS NO<sub>x</sub> standard section. These are as follows:

- 1) Since the source requested that the monitoring of the nitrogen content of fuel (40 CFR 60.334(h)(2)) be removed, the NO<sub>x</sub> emission allowance (F) in the standard needs to be zero in order to be compliant with the regulation. This change is in the Draft/Proposed CAAPP permit Condition 4.3.2(c)(i)(A).

- 2) Conditions 4.3.2(c)(i)(C) and (D) now reflect limitations from the appropriate construction permit that were previously included in the record keeping section.
- 3) Condition 4.3.2(f)(i)(B) now reflects a daily usage instead of a monthly usage pursuant to Construction Permit #94100030.

### **Nitrogen Oxides Emissions**

Changes to the Periodic Monitoring Compliance Method are as follows:

- ✓ Monitoring
  - o Perform annual Method ASTM D6522-00 monitoring instead of Method 7E pursuant to 35 IAC 217.394(d)(1).(Condition 4.3.2(c)(ii)(A))
  - o Delete non-applicable reference to 35 IAC 217.394(b)(1). (Previous Condition 4.3.2(c)(ii)(E))
  - o Delete NSPS monitoring for nitrogen content of fuel (Previous Condition 4.3.2(c)(ii)(A))
- ✓ Recordkeeping as follows (Condition 4.3.2(c)(ii)(H) through (K), (f)(ii)(B) through (D) and (g)(ii)(B)):
  - o Keep records of 35 IAC 217.396(a)(1) through (a)(8)
  - o Keep records of the annual calibration and maintenance

### **Rationale and Justification for Periodic Monitoring**

The changes above do not compromise Periodic Monitoring because its frequency and quality are not altered.

### **3.7 Periodic Monitoring General Discussions**

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

As a general matter, the required content of a CAAPP Permit with respect to such Periodic Monitoring is addressed in Section 39.5(7) of the Illinois Environmental Protection Act.<sup>3</sup> Section 39.5(7)(b) of the Illinois Environmental Protection Act<sup>4</sup> provides that in a CAAPP Permit:

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

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

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

Accordingly, the scope of the Periodic Monitoring that must be included in a CAAPP Permit is not restricted to monitoring requirements that were adopted through rulemaking or imposed through permitting. When applicable regulatory emission standards and control requirements or limits and control requirement in relevant Title 1 permits are not accompanied by compliance procedures, it is necessary for Monitoring for these standards, requirements or limits to be established in a CAAPP Permit.<sup>5, 6</sup> Monitoring requirements must also be established when standards and control requirement are accompanied by compliance procedures but those procedures are not adequate to assure compliance with the applicable standards or requirements.<sup>7, 8</sup> For this purpose, the requirements for Periodic Monitoring in a CAAPP Permit may include requirements for emission testing, emissions monitoring, operational monitoring, non-instrumental monitoring, and recordkeeping for each emission unit or group of similar units at a facility, as required by rule or permit, as appropriate or as needed to assure compliance with the applicable substantive requirements. Various combinations of monitoring measures will be appropriate for different emission units depending on their circumstances, including the substantive emission standards, limitations and control requirements to which they are subject.

What constitutes sufficient Periodic Monitoring for particular emission units, including the timing or frequency associated with such Monitoring requirements, must be determined by the permitting authority based on its knowledge, experience and judgment.<sup>9</sup> For example, as Periodic Monitoring must collect representative data, the timing of Monitoring requirements need not match the averaging time or compliance period of the associated substantive requirements, as set by the relevant regulations and permit provisions. The timing of the various requirements making up the Periodic Monitoring for an emission unit is something that must be considered when those Monitoring requirements are being established. For this purpose, Periodic Monitoring often consists of requirements that apply on a regular basis, such as routine recordkeeping for the operation of control devices or the implementation of the control practices for an emission unit. For certain units, this regular monitoring may entail "continuous" monitoring of emissions, opacity or key operating parameters of a process or its associated control equipment, with direct measurement and automatic recording of the selected parameter(s). As it is infeasible or impractical to require emissions monitoring for most emission units, instrumental monitoring is more commonly conducted for the operating parameters of an emission unit or its associated control equipment. Monitoring for operating parameter(s) serves to confirm proper operation of equipment, consistent with operation to comply with applicable emission standards and limits. In certain cases, an applicable rule may directly specify that a particular level of an operating parameter be maintained, consistent with the manner in which a unit was being operated during emission testing. Periodic Monitoring may also consist of requirements that apply on a periodic basis, such as inspections to verify the proper functioning of an emission unit and its associated controls.

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

There are a number of considerations or factors that are or may be relevant when evaluating the need to establish new monitoring requirements as part of the Periodic Monitoring for an emission unit. These factors include: (1) The nature of the emission unit or process and its emissions; (2) The variability in the operation and the emissions of the unit or process over time; (3) The use of add-on air pollution control equipment or other practices to control emissions and comply with the applicable substantive requirement(s); (4) The nature of that control equipment or those control practices and the potential for variability in their effectiveness; (5) The nature of the applicable substantive requirement(s) for which Periodic Monitoring is needed; (6) The nature of the compliance procedures that specifically accompany the applicable requirements; (7) The type of data that would already be available for the unit; (8) The effort needed to comply with the applicable requirements and the expected margin of compliance; (9) The likelihood of a violation of applicable requirements; (10) The nature of the Periodic Monitoring that may be readily implemented for the emission unit; (11) The extent to which such Periodic Monitoring would directly address the applicable requirements; (12) The nature of Periodic Monitoring commonly required for similar emission units at other facilities and in similar circumstances; (13) The interaction or relationship between the different measures in the Periodic Monitoring for an emission unit; and (14) The feasibility and reasonableness of requiring additional measures in the Periodic Monitoring for an emission unit in light of other relevant considerations.<sup>10</sup>

## **CHAPTER IV - CHANGES FROM PREVIOUSLY ISSUED CAAPP PERMITS**

### **4.1 Introduction**

In the draft permit action, the changes addressed below would be made using the CAAPP procedures for significant modification of permits, pursuant to Section 39.5(14)(c) of the Act. As previously discussed, every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping requirements shall be considered significant. Pursuant to 39.5(14)(c)(iii) of the Act, significant permit modifications must meet all the requirements of public participation, review by affected States, and review by USEPA applicable to initial permit issuance and permit renewal.

### **4.2 Specific Permit Condition Changes**

- The specific permit condition changes indicated in Chapter 3.6 above most significantly reflect changes in Periodic Monitoring, such as an ongoing test method for NOx and a stricter fuel usage record keeping requirement. Other changes indicate reorganizing of conditions, deleting a non-applicable regulation and renumbering of conditions.

Condition 4.1.2(c)(ii)(A): The test method in the Significant Modification is directly from regulation. Currently, there is no other method approved by the Illinois EPA.

Deleted: Condition 4.1.2(c)(ii)(D)CAAPP Renewal: The source is not subject based on Appendix G and is not part of an averaging plan.

Condition 4.2.2(c)(i)(A): The source requested the deletion of monitoring for the nitrogen content of the fuel (Condition 4.2.2(c)(ii)(A) CAAPP Renewal). In order for this to be compliant, the NOx emission allowance (variable F) in the Federal NOx standard must become "0".

Condition 4.2.2(c)(ii)(A): The method in the Significant Modification is directly from regulation. Currently, there is no other method approved by the Illinois EPA.

Deleted: Condition 4.2.2(c)(ii)(E)CAAPP Renewal: The source is not subject to the 35 IAC Part 217 based on Appendix G and is not part of an averaging plan.

Condition 4.3.2(c)(i)(A): The source requested the deletion of monitoring for the nitrogen content of the fuel (Condition 4.3.2(c)(ii)(A) CAAPP Renewal). In order for this to be compliant, the NOx emission allowance (variable F) in the Federal NOx standard must become "0".

Deleted: Conditions 4.3.2(c)(i)(C), (D) & (E) CAAPP Renewal: These limits are for different emission units.

Condition 4.3.2(c)(i)(C) and (D): These construction permits limits are moved from the recordkeeping section to the applicable standard section.

Condition 4.3.2(f)(i)(B): In accordance with the applicable construction permit, the operational limit for natural gas usage has changed to per "day" instead of per "month".

## Endnotes

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

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

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

<sup>4</sup> Section 39.5(7)(p)(i) of the Act also provides that a CAAPP permit shall contain "Compliance certification, testing, monitoring, reporting and record keeping requirements sufficient to assure compliance with the terms and conditions of the permit."

<sup>5</sup> The classic example of regulatory standards for which Periodic Monitoring requirements must be established in a CAAPP permit are state emission standards that pre-date the 1990 Clean Air Act Amendments that were adopted without any associated compliance procedures. Periodic Monitoring must also be established in a CAAPP permit when standards and limits are accompanied by compliance procedures but those procedures are determined to be inadequate to assure compliance with the applicable standards or limits.

<sup>6</sup> Another example of emission standards for which requirements must be established as part of Periodic Monitoring is certain NSPS standards that require initial performance testing but do not require periodic testing or other measures to address compliance with the applicable limits on a continuing basis.

<sup>7</sup> The need to establish Monitoring requirements as part of Periodic Monitoring when existing compliance procedures are determined to be inadequate, as well as when they are absent, was confirmed by the federal appeals court in *Sierra Club v. Environmental Protection Agency*, 536 F.3d 673, 383 U.S. App. D.C. 109.

<sup>8</sup> The need to establish Monitoring requirements as part of Periodic Monitoring is also confirmed in USEPA's Petition Response. USEPA explains that "...if there is periodic monitoring in the applicable requirements, but that monitoring is not sufficient to assure compliance with permit terms and conditions, permitting authorities must supplement monitoring to assure such compliance." Petition Response, page 6.

<sup>9</sup> The test for the adequacy of "Periodic Monitoring" is a context-specific determination, particularly whether the provisions in a Title V permit reasonably address compliance with relevant substantive permit conditions. 40 CFR 70.6(c)(1); see also 40 CFR 70.6(a)(3)(i)(B); see also, *In the Matter of CITGO Refinery and Chemicals Company L.P.*, Petition VI-2007-01 (May 28, 2009); see also, *In the Matter of Waste Management of LA. L.L.C. Woodside Sanitary Landfill & Recycling Center, Walker, Livingston Parish, Louisiana*, Petition VI-2009-01 (May 27, 2010); see also, *In the Matter of Wisconsin Public Service Corporation's JP Pulliam Power Plant*, Petition V-2009-01 (June 28, 2010).

<sup>10</sup> A number of these factors are specifically listed by USEPA in its Petition Response. USEPA also observes that the specific factors that it identifies in its Petition Response with respect to Periodic Monitoring provide "...the permitting authority with a starting point for its analysis of the adequacy of the monitoring; the permitting authority also may consider other site-specific factors." Petition Response, page 7.