

Statement of Basis

for the DRAFT CAAPP Permit for:

Source Name:

Automotive Robotics Proving Lab

Statement of Basis No.: 10090024-1209

I.D. No.: 179020ADF

Permit No.: 10090024

Date Prepared: 4/5/13

Permitting Authority:

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

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

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PREFACE

Reason For This Document

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

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

Purpose Of This Document

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

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

The Illinois EPA received an application for a new CAAPP permit from ARPL on September 10, 2010. After analytical review, a Draft CAAPP Permit was submitted on October 18, 2012. The Draft went to public notice on November 8, 2012. Significant public interest warranted a revision of the draft permit. This current draft is the revised Draft CAAPP Permit.

Limitations

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

This document does not purport to establish policy or guidance.

INTRODUCTION

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

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

- Emissions of:
 - PM₁₀
 - NO_x
 - VOM
 - CO
 - SO₂
 - HAP

- Emission units:
 - TEST CELL #1 (750 MAX HP)
 - TEST CELL #2 (3000 MAX HP)
 - TEST CELL #3 (3000 MAX HP)
 - TEST CELL #4 (4500 MAX HP)
 - TEST CELL #5 (4500 MAX HP)
 - TEST CELL #6 (4000 MAX HP)
 - TEST CELL #7 (300 MAX HP)
 - TEST CELL #8 (3000 MAX HP)
 - TEST CELL #9 (3000 MAX HP)

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

It is Illinois EPA's preliminary determination that this source's Permit Application meets the standards for issuance of a "Final" CAAPP Permit as

stipulated in Section 39.5(10)(a) of the Illinois Environmental Protection Act (see Chapter I - Section 1.2 of this document). The Illinois EPA is therefore initiating the necessary procedural requirements to issue a Final CAAPP Permit. The Illinois EPA has posted the Draft CAAPP permit and this Statement of Basis on USEPA website:

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

CHAPTER I - LEGAL BASIS FOR THE PERMIT AND PERMIT CONDITIONS

1.1 Legal Basis for Program

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

1.2 Legal Basis for Issuance of CAAPP Permit

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

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

a. Application Status

The source submitted an application for a New CAAPP Permit on September 10, 2010. The source is currently operating under an application shield resultant from a timely and complete renewal application submittal. This Draft CAAPP Permit addresses application content and necessary revisions to meet the requirements for issuance of the permit.

b. Present Compliance Status

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

However, at the time of this Draft CAAPP Permit, there is a pending violation notice against the source (Violation Notice Number: A-2010-00121)

Trigger Date	Rule	Violation
5/5/2010	Section 39.5(6)(b)	Failed to obtain CAAPP permit or FESOP permit

This violation will be resolved with the issuance of a final and effective CAAPP Permit.

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 was not required to submit any additional application material.

1.3 Legal Basis for Conditions in the CAAPP Permit

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

a. Applicable Federal Regulations

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

b. Applicable SIP Regulations

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

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

c. Other Applicable Requirements

The source also has several applicable requirements that are based on SIP approved permits, which are listed and identified in Chapter II Section 2.8.

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: 8734
County: Tazewell

The source operates engine test cells to test heavy duty, off road, compression ignition and spark ignition engines with a maximum capacity of up to 4,500 horsepower. These cells test both diesel and natural gas fired units. Each cell is equipped with a dynamometer that limits the size of the engine to that cell's given maximum horsepower rating. In addition, each cell is equipped with a fuel gauge to monitor fuel consumption. A small percentage of engines (one percent or less) are tested with some emission controls removed, depending on the nature of the test to be performed. During these instances, as well as all other engine testing, the source shall continue to remain within permitted emission limits.

The source contains the following processes:

<i>Emission Units</i>	<i>Description</i>
Test Cell #1	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 750 horsepower.
Test Cell #2	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 3000 horsepower.
Test Cell #3	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 3000 horsepower.
Test Cell #4	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 4500 horsepower.
Test Cell #5	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 4500 horsepower.
Test Cell #6	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 4000 horsepower.
Test Cell #7	Test cell for heavy duty off road engines operating with diesel with maximum capacity of 300 horsepower.
Test Cell #8	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 3000 horsepower.
Test Cell #9	Test cell for heavy duty off road engines operating with diesel and natural gas with maximum capacity of 3000 horsepower.

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 as of the date of permit issuance designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (carbon monoxide, lead, nitrogen dioxide, ozone, PM_{2.5}, PM₁₀, sulfur dioxide). (See 40 CFR Part 81 - Designation of Areas for Air Quality Planning Purposes)

2.5 Source Status

The source requires a CAAPP permit because this source is considered major (based on its PTE) for the following regulated pollutants: nitrogen oxides (NO_x), and carbon monoxide (CO).

This source is considered a natural minor for the following regulated pollutants: PM₁₀, PM_{2.5}, volatile organic material (VOM), sulfur dioxide (SO₂), and hazardous air pollutant (HAP).

Based on available data, this source is not a major source of emissions for GHG. Automotive Robotics Proving Lab (ARPL) voluntarily submitted data on its emissions of GHG in its 2011 AER, reporting actual annual emissions of GHG of 3873 tons per year. The emissions consist of 3873 tons of CO₂, 0 tons of N₂O, and 0 tons of methane.

This source is subject to an "applicable requirement," as defined by Section 39.5(1) of the Act, for emissions of greenhouse gases (GHG) as defined by 40 CFR 86.1818-12(a), as referenced by 40 CFR 52.21(b)(49)(i). There are no GHG-related requirements under the Illinois Environmental Protection Act, Illinois' State Implementation Plan, or the Clean Air Act that apply to this facility. In particular, the USEPA's Mandatory Reporting Rule for GHG emissions, 40 CFR Part 98, does not constitute an "applicable requirement" because it was adopted under the authority of Sections 114(a)(1) and 208 of the Clean Air Act.

NOTE: However, there are terms or conditions from Construction Permit #11090046, addressing emissions of GHG or BACT for emissions of GHG from a major project at this facility under the PSD rules.

This permit does not relieve the Permittee from the legal obligation to comply with the relevant provisions of the Federal Mandatory Reporting Rule.

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>2011</i>	<i>2010</i>
CO	98.98	35.93
NO _x	62.93	25.05
PM	0.41	0.30
SO ₂	2.58	3.18
VOM	1.49	1.15
CO _{2E}	3873.25	2233.44
HAP (total)	-	-

SO₂ emissions are greater than the current "fee allowable limit" because it was just modified(decreased) to reflect a change in sulfur content from 500ppm to 15ppm.

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>Current Tons/Year</i>	<i>Previous Tons/Year</i>
Volatile Organic Material	(VOM)	10	10
Sulfur Dioxide	(SO ₂)	1.5	30.7
Particulate Matter	(PM)	2.5	2.5
Nitrogen Oxides	(NO _x)	155.3	155.3
HAP, not included in VOM or PM	(HAP)	-	-
Total		169.3	198.5

2.8 SIP Permit Facts (T1 Limits)

CAAPP Permits must address all "applicable requirements," which includes the terms and conditions of preconstruction permits issued under regulations approved by USEPA in accordance with Title I of the CAA (See definition of applicable requirements in Section 39.5(1) of the Illinois Environmental Protection Act). Preconstruction permits, commonly referred to in Illinois as Construction Permits, derive from the New Source Review ("NSR") permit programs required by Title I of the CAA. These programs include the two major NSR permit programs: (1) the Prevention of Significant Deterioration ("PSD") program¹ and (2) the nonattainment NSR program.² These programs also encompass state construction permit programs for projects that are not major.

In the CAAPP or Illinois's Title V permit program, the Illinois EPA's practice is to identify requirements that are carried over from an earlier Title I permit into a New or Renewed CAAPP Permit as "TI" conditions (i.e., Title I conditions). Title I Conditions that are revised as part of their incorporation into a CAAPP Permit are further designated as "TIR." Title I Conditions that are newly established through a CAAPP Permit are designated as "TIN." It is important that Title I Conditions be identified in a CAAPP Permit because these conditions will not expire when the CAAPP Permit expires. Because the underlying authority for Title I Conditions comes from Title I of the CAA and their initial establishment in Title I Permits, the effectiveness of T1 Conditions derives from Title I of the CAA rather than being linked to Title V of the Act. 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 because this is a new CAAPP source.
- Newly Issued Construction Permits:

<i>Permit No.</i>	<i>Date Issued</i>	<i>Subject</i>
10010029	May 3, 2012	Heavy Duty Off Road Engine Test Cells (Cells 5, 6, and 7)
11090046	February 6, 2012	Engine Test Cells (Cells 8 and 9)
12020018	March 5, 2012	Modification of Engine Test Cells (Cells 2, 3, and 6)

- There are no newly issued Construction Permits for projects not yet constructed for this source.
- The following table lists the T1R Limit issued by the Illinois EPA and require incorporation into the CAAPP Permit prior to the proposal and issuance of this Draft CAAPP Permit.

<i>T1 Type</i>	<i>Condition</i>	<i>Subject</i>
T1R	Section 3 Condition 3.4(a)(i)(A)	Minor NSR limit
T1R	Section 3 Condition 3.4(a)(i)(B)	Minor NSR limit

Reason: New lower Hazardous Air Pollutant (HAP) limits established, to avoid more stringent periodic monitoring requirements.

- 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

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

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

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

3.4 Field Inspection Results

A review of the source's latest field inspection report dated 2/1/2012 demonstrates the source's ability to comply with all applicable requirements.

3.5 Historical Non-Compliance

Trigger Date	Rule	Violation
5/5/2010	201.142	Allowed construction without obtaining a construction permit
5/5/2010	254.132(a), 201.302(a)	Failed to submit AER for 2009
2/1/2012	201.142	Failed to obtain construction permit
2/1/2012	Condition 8(b)	Violated its fuel type usage limitations, without obtaining permit for change
2/1/2012	Condition 9(a)(i)	Operated more than established monthly operating hour limits of construction permit and exceeded monthly and annual emission limits
2/1/2012	Condition 16(a)	Failed to report deviations

These violations have been resolved.

3.6 Source Wide Justifications and Rationale

Applicable Requirements Summary		
Applicable Requirement	Type	Location
Fugitive Particulate Matter (35 IAC 212.301 and 35 IAC 212.314)	Applicable Standard	See the Permit, Condition 3.1(a)
GHG Requirement (Construction Permit #11090046)	Applicable Limit	See the Permit, Condition 3.3(a)
HAP Requirement (Construction Permit #11090046)	Applicable Limit	See the Permit, Condition 3.4(a)

HAP Requirement (Construction Permit #11090046)	Applicable Limit	See the Permit, Condition 3.4(a)
Operational and Production Requirement (Construction Permit #11090046)	Applicable Limit	See the Permit, Condition 3.4(b)

Particulate Matter Emission

- ✓ Monitoring as follows (Condition 3.1(a)(ii))
 - o If required, daily observations for a week for PM emissions.
- ✓ Recordkeeping as follows (Condition 3.1(a)(ii)):
 - o If required, records for the observations.
- ✓ Reporting as follows (Condition 3.1(a)(ii)):
 - o If required, reports for the observations.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance. Fugitive particulate emission sources are limited to paved roads and parking lots.
- Source has not exhibited a history of non-compliance for particulate emissions. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.

GHG Emissions

- ✓ Recordkeeping as follows (Condition 3.3(a)(ii)(A) and Condition 3.3(a)(ii)(B)):
 - o Records of individual GHG emissions from the source
 - o Records of combined GHG emissions from the source
- ✓ Reporting as follows (Condition 3.5(a)):
 - o Prompt reporting within 30 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.
- Pursuant to Construction Permit #11090046, the liquid and gaseous fuel usage for all engine test cells are limited to 1,202,150 gallons/year and 90.0 mmscf/year. The source is also required to operate, calibrate, and maintain a device that continuously records the fuel usage of each fuel in each test cell. Monitoring of fuel usage in the test cells is sufficient to show compliance, since the annual fuel limit ensures that emissions cannot exceed permitted limits.

HAP Emissions

- ✓ Testing as follows (Condition 3.4(a)(ii)(A) and 3.4(a)(ii)(B))
 - o Testing required following an exceedance
 - o Stack testing required when CO emissions meet designated threshold
- ✓ Recordkeeping as follows (Condition 3.4(a)(ii)(C)):
 - o Records of emissions from each engine
 - o Records of emissions from all engines combined
- ✓ Reporting as follows (Condition 3.5(a)):

- o Prompt reporting within 30 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance. See sections 3.3 and 3.5 of this document.
- Pursuant to Construction Permit #11090046, the liquid and gaseous fuel usage for all engine test cells are limited to 1,202,150 gallons/year and 90.0 mmscf/year. The source is also required to operate, calibrate, and maintain a device that continuously records the fuel usage of each fuel in each test cell. Monitoring of fuel usage in the test cells is sufficient to show compliance, since the annual fuel limit ensures that emissions cannot exceed permitted limits.

All Emissions

- ✓ Monitoring as follows (Condition 3.4(b)(ii)(A))
 - o Monitoring of both types of fuel using a continuous monitoring device
- ✓ Recordkeeping as follows (Condition 3.4(b)(ii)(B), 3.4(b)(ii)(C), and 3.4(b)(ii)(D)):
 - o Records of fuel usage
 - o Records of heat content of fuels
 - o Records of calibration, maintenance, repair, and replacement of monitoring equipment
- ✓ Reporting as follows (Condition 3.5(a)):
 - o Prompt reporting within 30 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Emission factors are based on fuel usage and heat content of the fuels. Accurate fuel usage and heat content records ensures accurate data on emissions.

Non-Applicability Discussion

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

Prompt Reporting Discussion

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

3.7 Emission Unit Justifications and Rationale

4.1. Engine Test Cells		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123)	Applicable Standard	See the Permit, Condition 4.1.2(a)
SO ₂ Requirement (35 IAC 214.301)	Applicable Standard	See the Permit, Condition 4.1.2(b)
VOM Requirement	Applicable	See the Permit, Condition 4.1.2(c)

(35 IAC 215.301)	Standard	
CO Requirement (Construction Permit #11090046)	Applicable Limit	See the Permit, Condition 4.1.2(d)
NO _x Requirement (Construction Permit #11090046)	Applicable Limit	See the Permit, Condition 4.1.2(e)
Operational and Production Requirement (Construction Permit #10010029)	Applicable Limit	See the Permit, Condition 4.1.2(f)
Operational and Production Requirement (Section 39.5(7)(a) of the Act)	Applicable Work Practice	See the Permit, Condition 4.1.2(f)
Operational and Production Requirement (Section 39.5(7)(b) of the Act)	Applicable Work Practice	See the Permit, Condition 4.1.2(f)
Operational and Production Requirement (Construction Permit #12020018)	Applicable Work Practice	See the Permit, Condition 4.1.2(f)
Work Practice Requirement (Section 39.5(7)(a) of the Act)	Applicable Work Practice	See the Permit, Condition 4.1.2(g)

Visible Emissions (i.e., Opacity)

- ✓ Monitoring as follows (Condition 4.1.2(a)(ii)(A))
 - o Annual Method 22 observations
 - o If required, Method 9 measurements
- ✓ Recordkeeping as follows (Conditions 4.1.2(a)(ii)(B) and (a)(ii)(C)):
 - o Records of each Method 22 observation
 - o If required, records of each Method 9 measurement
- ✓ Reporting as follows (Condition 4.1.5(a)):
 - o Prompt reporting within 30 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance for particulate emissions. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.

Sulfur Emissions

- ✓ Testing as follows (Conditions 4.1.2(b)(ii)(A) and 4.1.2(b)(ii)(B))
 - o Source shall test fuels used for sulfur content at least twice a year, in accordance with Method 6
- ✓ Monitoring as follows (Conditions 4.1.2(b)(ii)(D))
 - o Source shall only use ultra low sulfur diesel and pipeline quality natural gas
- ✓ Recordkeeping as follows (Condition 4.1.2(b)(ii)(E), 4.1.2(b)(ii)(F), and 4.1.2(b)(ii)(G)):
 - o Records of sulfur content in the liquid fuel
 - o Records of sulfur content in the gaseous fuel
 - o Records of the fuel analysis
- ✓ Reporting as follows (Condition 4.1.5(a) and Condition 4.1.5(b)):

- o Prompt reporting within 30 days
- o Reporting of exceedance of monthly limits within 5 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.
- Source has not exhibited a history of non-compliance for sulfur emissions. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.
- Ultra low sulfur diesel fuel is the only liquid fuel used.
- The likelihood of the engine test cells violating the sulfur limit is unlikely. Ultra low sulfur diesel has sulfur content limited to levels that would result in SO₂ emissions less than the limit. Pursuant to 40 CFR 80.510, as of the date of issuance of this permit, ultra low sulfur diesel must have a sulfur content less than 15ppm for non-road engines, thus resulting in SO₂ emissions less than the 2,000 ppm limit as per 35 IAC 214.301. 15 ppm for diesel fuel roughly calculates to be 1.4 tons per year of SO₂ emissions, provided all the test cells are run year round at maximum capacity. It should also be noted that the source is also required to maintain records of sulfur emissions. Testing further ensures compliance with sulfur content in the fuels.
- Pipeline quality natural gas is the only gaseous fuel used.
- The likelihood of the engine test cells violating the sulfur limit is unlikely. Pipeline quality natural gas has sulfur content limited to levels that would result in SO₂ emissions less than the limit. Pursuant to 40 CFR 72.2 to be considered pipeline quality natural gas it must contain 0.5 grains sulfur/ 100 scf or less (less than 1.0 ppm), thus resulting in SO₂ emissions less than the 2,000 ppm limit as per 35 IAC 214.301. 1 ppm for pipeline quality natural gas roughly calculates to be 0.03 tons per year of SO₂ emissions, provided all the natural gas fuel is consumed. It should also be noted that the source is also required to maintain records of sulfur emissions. Testing further ensures compliance with sulfur content in the fuels.
- Pursuant to Construction Permit #11090046, the liquid and gaseous fuel usage for all engine test cells are limited to 1,202,150 gallons/year and 90.0 mmscf/year. The source is also required to operate, calibrate, and maintain a device that continuously records the fuel usage of each fuel in each test cell. Monitoring of fuel usage in the test cells is sufficient to show compliance, since the annual fuel limit ensures that emissions cannot exceed permitted limits.

Carbon Monoxide Emissions

- ✓ Testing as follows (Conditions 4.1.2(d)(ii)(A) and 4.1.2(g)(ii)(A))
 - o Stack Testing required when CO emissions meet designated threshold
- ✓ Recordkeeping as follows (Condition 4.1.2(d)(ii)(C)):
 - o Records of emissions from each engine
 - o Records of emissions from all engines combined
- ✓ Reporting as follows (Condition 4.1.5(a) and Condition 4.1.5(b)):
 - o Prompt reporting within 30 days
 - o Reporting of exceedance of monthly limits within 5 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Source has not exhibited a history of non-compliance. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.
- Pursuant to Construction Permit #11090046, the liquid and gaseous fuel usage for all engine test cells are limited to 1,202,150 gallons/year and 90.0 mmscf/year. The source is also required to operate, calibrate, and maintain a device that continuously records the fuel usage of each fuel in each test cell. Monitoring of fuel usage in the test cells is sufficient to show compliance, as fuel usage can be directly correlated to emissions.

Nitrogen Oxides Emissions

- ✓ Testing as follows (Conditions 4.1.2(e)(ii)(A) and 4.1.2(g)(ii)(A))
 - o Stack Testing required when CO emissions meet designated threshold
- ✓ Recordkeeping as follows (Condition 4.1.2(e)(ii)(C)):
 - o Records of emissions from each engine
 - o Records of emissions from all engines combined
- ✓ Reporting as follows (Condition 4.1.5(a) and Condition 4.1.5(b)):
 - o Prompt reporting within 30 days
 - o Reporting of exceedance of monthly limits within 5 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Source has not exhibited a history of non-compliance. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.
- Pursuant to Construction Permit #11090046, the liquid and gaseous fuel usage for all engine test cells are limited to 1,202,150 gallons/year and 90.0 mmscf/year. The source is also required to operate, calibrate, and maintain a device that continuously records the fuel usage of each fuel in each test cell. Monitoring of fuel usage in the test cells is sufficient to show compliance, as fuel usage can be directly correlated to emissions.

Organic Material Emission

- ✓ Testing as follows (Conditions 4.1.2(c)(ii)(A) and 4.1.2(g)(ii)(A))
 - o Stack Testing required when CO emissions meet designated threshold
- ✓ Recordkeeping as follows (Condition 4.1.2(c)(ii)(C)):
 - o Records of emissions from each engine
 - o Records of emissions from all engines combined
- ✓ Reporting as follows (Condition 4.1.5(a) and Condition 4.1.5(b)):
 - o Prompt reporting within 30 days
 - o Reporting of exceedance of monthly limits within 5 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- There is a small likelihood of an exceedance.
- Emissions do not vary significantly under normal operation and/or vary slowly with time.

- Source has not exhibited a history of non-compliance for VOM emissions. See sections 3.3 and 3.5 of this document.
- Monitoring is consistent with other sources in this source category.
- Emissions are considered negligible
- Pursuant to Construction Permit #11090046, the liquid and gaseous fuel usage for all engine test cells are limited to 1,202,150 gallons/year and 90.0 mmscf/year. The source is also required to operate, calibrate, and maintain a device that continuously records the fuel usage of each fuel in each test cell. Monitoring of fuel usage in the test cells is sufficient to show compliance, since the annual fuel limit ensures that emissions cannot exceed permitted limits.

All Emissions

- ✓ Monitoring as follows (Condition 4.1.2(g)(ii)(A))
 - o Annual inspections of each test cell's instrumentation, enclosures, stacks, and mufflers
- ✓ Recordkeeping as follows (Condition 4.1.2(g)(ii)(B) and 4.1.2(g)(ii)(C)):
 - o Records of annual inspections
 - o Records when a Tier level control is removed from an engine during testing.
- ✓ Reporting as follows (Condition 4.1.5(a) and Condition 4.1.5(b)):
 - o Prompt reporting within 30 days
 - o Reporting of exceedance of monthly limits within 5 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Annual inspections ensures test cells are in proper working order. Properly working test cells and equipment ensure accuracy of emissions calculations, as emissions due to defects and problems are addressed.
- Records and prompt 5 day reporting for when a Tier level emission control is removed shows the impact of testing without controls has on emissions. This would allow the Illinois EPA to take measures, such as testing, should a significant impact be identified.

Non-Applicability Discussion

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

Prompt Reporting Discussion

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

Other Reporting Discussion

Other reporting has been established as 5 days. The short reporting time and low threshold for reporting based on monthly limits provides for more efficient information exchange in the event of removing a TIER emission control from the engine. In addition, this would allow the Illinois EPA to require testing if it was determined that a significant impact would result.

This other reporting listed in Condition 4.1.5(b) is not the same as regular deviation reporting found in Condition 4.1.5(a). All deviations require the

standard 30 days reporting upon occurrence. This other reporting is above and beyond the standard reporting, given the source could operate an engine without its TIER controls. When this happens, the emissions will be greater and the testing is beyond the standard testing, such that fuel usage may increase. Therefore, so that the Illinois EPA can distinguish deviations from lack of TIER controls from normal deviations, the reporting time is stricter. The Illinois EPA can then monitor these engine tests and take the appropriate follow-up action.

There is no need to change the permit condition to state this reporting is in addition to regular reporting because it is under the "Other Reporting" requirements, which do not replace or supercede the regular deviation reporting. This reporting has been coupled to the records as discussed later on Page 34, item #8.

3.8 Insignificant Activities Discussion

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

3.9 Prompt Reporting Discussion

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

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

Regulatory Reports

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

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

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

Deviation Reports (Prompt Reporting)

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

Neither the CAAPP nor the federal rules upon which the CAAPP is based and was approved by USEPA define the term "prompt". Rather, 40 CFR Part 70.6(a) (3) (iii) (B) intended that the term have flexibility in application. The USEPA has acknowledged for purposes of administrative efficiency and clarity that the permitting authority (in this case, Illinois EPA) has the discretion to define "prompt" in relation to the degree and type of deviation likely to occur at a particular source. The Illinois EPA follows this approach and defines prompt reporting on a permit-by-permit basis. In instances where the underlying applicable requirement contains "prompt" reporting, the Illinois EPA typically incorporates the pre-established timeframe in the CAAPP permit (e.g. a NESHAP or NSPS deviation report). Where the underlying applicable requirement fails to explicitly set forth the timeframe for reporting deviations, the Illinois EPA generally uses a timeframe of 30 days to define prompt reporting of deviations.

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

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

Semi-Annual Monitoring Reports

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

Annual Compliance Certifications

Section 39.5(7)(p)(v) of the Illinois Environmental Protection Act mandates that each CAAPP Permit require a source to submit a certification of its compliance status with each term and condition of its CAAPP Permit. The reports afford a broad assessment of a CAAPP sources compliance status. The CAAPP requires that this report be submitted, regardless of compliance status, on an annual basis. Each CAAPP Permit requires this annual certification be submitted by May 1 of the year immediately following the calendar year reporting period. The report shall be certified by a responsible official. The Draft CAAPP Permit for this source would require such a report at Condition 2.6(a).

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

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

As a result, the Illinois EPA's approach to prompt reporting of deviations as discussed herein is consistent with the requirements of Section 39.5(7)(f)(ii) of the Illinois Environmental Protection Act as well as 40 CFR Part 70 and the CAA. This reporting arrangement is designed so that the

source will appropriately notify the Illinois EPA of those events that might warrant individual attention.

3.10 Incorporation by Reference Discussion

Based on guidance found in White Paper 2 and past petition responses by the Administrator, it is recognized that Title V permit authorities may, within their discretion, incorporate plans by reference. As recognized in the *White Paper 2*, permit authorities can effectively streamline the contents of a Title V permit, avoiding the inevitable clutter of restated text and preventing unnecessary delays where, as here, permit issuance is subject to a decision deadline.³ However, it is also recognized that the benefits of incorporation of plans must be carefully balanced by a permit authority with its duty to issue permits in a way that is "clear and meaningful" to the Permittee and the public.⁴

The criteria that are mentioned in USEPA Administrator Petition Responses stress the importance of identifying, *with specificity*, the object of the incorporation.⁵ The Illinois EPA agrees that such emphasis is generally consistent with USEPA's pronouncements in previous guidance.

For each condition incorporating a plan, the Illinois EPA is also briefly describing the general manner in which the plan applies to the source. Identifying the nature of the source activity, the regulatory requirements or the nature of the equipment associated with the plan is a recommendation of the *White Paper 2*.⁶ The Illinois EPA has stopped short of enumerating the actual contents of a plan, as restating them in the permit would plainly defeat the purpose of incorporating the document by reference and be contrary to USEPA guidance on the subject.⁷

Plans may need to be revised from time to time, as occasionally required by circumstance or by underlying rule or permit requirement. Except where expressly precluded by the relevant rules, this Draft CAAPP Permit allows the Permittee to make future changes to a plan without undergoing formal permit revision procedures. This approach will allow flexibility to make required changes to a plan without separately applying for a revised permit and, similarly, will lessen the impacts that could result for the Illinois EPA if every change to a plan's contents required a permitting transaction.⁸ Changes to the incorporated plans during the permit term are automatically incorporated into the Draft CAAPP Permit unless the Illinois EPA expresses a written objection.

The Draft CAAPP Permit incorporates by reference the following plans: Episode Action Plan.⁹

3.11 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.¹⁰ Section 39.5(7)(b) of the Illinois Environmental Protection Act¹¹ 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.^{12, 13} 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.^{14, 15} 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.¹⁶ 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.¹⁷

CHAPTER IV - CHANGES FROM PREVIOUS DRAFT CAAPP PERMIT

4.1 Major Changes Summary

Due to public concerns, the revised draft permit has addressed issues of emissions exceedances due to removal of Tier controls, monitoring of pollutants, and reduction of sulfur dioxide in the fee schedule.

4.2 Specific Permit Condition Changes

Conditions 3.4(a)(i)(A) and (B) now correctly reflect Construction Permit #11090046.

Increased opacity monitoring for each test cell. See Condition 4.1.2(a)(ii)(B).

Calibration and maintenance of fuel monitoring equipment has been included, to be performed annually. See Condition 3.4(b)(ii)(D).

Added an inspection requirement for instrumentation and integrity of cells. See Condition 4.1.2(g)(ii)(A).

Increased testing established for SO₂, VOM, CO, NO_x, and individual HAPs when CO exceeds 125 tons per year. See Conditions 4.1.2(d)(ii)(A), 4.1.2(b)(ii)(B), 4.1.2(c)(ii)(A), 4.1.2(e)(ii)(A), and 3.4(a)(ii)(A)(II).

Additional recordkeeping established in Condition 4.1.2(g)(ii)(C) when Tier level emission controls are removed.

Additional reporting established in Condition 4.1.5(b) to determine when emission controls that are removed leads to exceedances.

Fee schedule limit for sulfur dioxide has been lowered from 30.7 tons per year to 1.5 tons per year, to reflect proper calculation of sulfur dioxide based on 15 ppm sulfur content of the liquid fuel.

Attachment A: Response to Comments and Justifications

1. Newly Established or Revised Title I Conditions

Conditions 3.4(a)(i)(A) and (B) contain newly established or revised Title I conditions but the permit is not titled or otherwise clearly labeled as a combined Title I/Title V permit. Provision II.A.1 of the February 14, 2000 *Memorandum of Understanding between Region V of the U.S. Environmental Protection Agency and the Illinois Environmental Protection Agency* (combined Title I/Title V permits memorandum) requires combined Title I/Title V permits to be "titled or labeled to reflect that they are issued under both Title I and Title V of the Clean Air Act, the Illinois State Implementation Plan (SIP), and corresponding State laws and regulations, including Illinois' Clean Air Act Permit Program (CAAPP)." Historically, Illinois EPA has addressed the requirements of the combined Title I/Title V permits memorandum by including in the permit's title page the words "[Title I and Title V Permit]". See, for example, Draft/Proposed Permit for The Gillette Company/P&G, North Chicago Plant; issued 02/02/2012. Please ensure that the permit is titled or otherwise clearly labeled as a combined Title I/Title V permit as required by the combined Title I/Title V permits memorandum.

Ans: The comment is correct. The Illinois EPA missed adding this to the Title of the permit. The "new" draft permit has been corrected to reflect the proper permitting authorities as Title I and Title V.

Additionally, please clarify the legal authority for Conditions 3.4(a)(i)(A) and (B). The draft CAAPP permit cites "CAAPP Permit #10090024" (i.e., the draft Title V permit for ARPL) as the legal authority for Conditions 3.4(a)(i)(A) and (B). EPA expects the legal authority for Title I conditions to be a construction permit (if one has been issued), or a Title I provision in the state or federal rules or other source (such as an enforcement Order) that is the basis for the proposed requirements.

Ans: The comment is correct. The origin of this condition is Construction Permit #11090046. The Title V permit made a TIR modification to the underlying construction permit to reduce HAP synthetic minor limits. Conditions 3.4(a)(i)(A) and (B) now correctly reflect Construction Permit #11090046.

2. Compliance with Numerical Emission Limits

Please clarify how the source will demonstrate compliance with the carbon dioxide (CO₂) emission limits in Condition 3.3(a)(i); the hazardous air pollutant (HAP) emission limits in Condition 3.4(a)(i)(A)-(B); the carbon monoxide (CO) emission limits in Condition 4.1.2(d)(i)(A); and the nitrogen oxides (NO_x) emission limits in Condition 4.1.2(e)(i)(A). Our specific concerns are as follows:

a. CO₂ emission limits

Pursuant to Condition 3.3(a)(ii), it appears the source will demonstrate compliance with the CO₂ emission limits in Condition 3.3(a)(i) by keeping "records of annual emissions" of individual greenhouse gases and carbon dioxide equivalents (CO₂e), "with supporting calculations." The Statement of Basis (SB) further explains that "Monitoring of fuel usage in the test cells is sufficient to show compliance, since the annual fuel limit ensures that emissions cannot exceed permitted limits." SB at 14-15. However, neither the

draft CAAPP permit nor the SB explains how the source will calculate emissions for purposes of demonstrating compliance with the numerical CO₂e emission limits. The permit record does not show sample calculations or equations to illustrate how the source will calculate emissions for purposes of generating the required "records" and for demonstrating compliance with the numerical limits. The draft CAAPP permit must specify the periodic monitoring methodology (e.g., emission factors, source testing, etc). *In the Matter of United States Steel Corporation - Granite City Works, CAAPP Permit No. 96030056* (Order on Petition) at 12 (December 3, 2012) (*U.S. Steel*). If the source will use emission factors for periodic monitoring, the permit record must specify the emission factors that the source initially intends to use, how the emission factors were derived, whether the emission factors are indicative of the emissions at the source, or an explanation of why use of the emission factors is adequate to assure compliance with the emission limits. *Id.*

b. Synthetic minor HAP emission limits

Condition 3.4(a)(ii)(B) requires the source to maintain records of the individual and total HAP emissions from the source "including supporting calculations (ton/month and ton/year)." Additionally, Condition 3.4(a)(ii)(A) requires testing of HAP emissions "[i]f in the previous calendar year, the source exceeded the production limitations [i.e., limitations on fuel usage] in Condition 3.4(b)(i)." ¹ The SB explains that "Monitoring of fuel usage in the test cells is sufficient to show compliance, since the annual fuel limit ensures that emissions cannot exceed permitted limits." SB at 15. However, neither the draft CAAPP permit nor the SB explains how the source will calculate emissions for purposes of demonstrating compliance with the numerical HAP emission limits. The draft CAAPP permit does not specify how the source will demonstrate compliance with the HAP emission limits in Condition 3.4(a)(i) when the source does not exceed the "production limits" referenced by Condition 3.4(a)(ii)(A). The draft CAAPP permit must specify the periodic monitoring methodology (e.g., emission factors, source testing, etc). *U.S. Steel* at 12. If the source will use emission factors for periodic monitoring, the permit record must specify the emission factors that the source initially intends to use, how the emission factors were derived, whether the emission factors are indicative of the emissions at the source, or an explanation of why use of the emission factors is adequate to assure compliance with the emission limits. *Id.*

c. CO emission limits

Condition 4.1.2(d)(i)(A) limits CO emissions from the test cells to a combined total of 24.5 tons/month and 245.0 tons/year and compliance is demonstrated through recordkeeping of emissions, "with supporting calculations." See Condition 4.1.2(d)(ii). The source is required to maintain records of monthly and annual emissions of CO from the engine test cells, in tons/month and tons/year (12 month rolling average), "based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations." However, neither the draft CAAPP permit nor the SB specifies what the source will include in the "supporting calculations." The permit record does not show sample calculations or equations to illustrate how the source will calculate emissions for purposes of generating the required

¹ Condition 3.4(a)(ii)(A)(I) points to "production limitations in Condition 3.4(a)(i)" but EPA believes the correct citation is Condition 3.4(b)(i) and not Condition 3.4(a)(i) since Condition 3.4(a)(i) sets HAP emission limits (in tons per month and tons per year) and Condition 3.4(b)(i) sets "production limitations" in gallons and cubic feet of fuel per month and per year.

records and for demonstrating compliance with the numerical limits. As discussed above, if the source will use emission factors for periodic monitoring, the permit record must specify the emission factors that the source initially intends to use, how the emission factors were derived, whether the emission factors are indicative of the emissions at the source, or an explanation of why use of the emission factors is adequate to assure compliance with the emission limits.

d. NOx emission limits

Condition 4.1.2(e)(i)(A) limits NOx emissions from the test cells to a combined total of 18.0 tons/month and 180.0 tons/year and compliance is demonstrated through recordkeeping of emissions, "with supporting calculations." See Condition 4.1.2(e)(ii). The source is required to maintain records of monthly and annual emissions of NOx from the engine test cells, in tons/month and tons/year (12 month rolling average), "based on the fuel usage from Condition 3.4(b)(ii)(B) and operating hours from Condition 4.1.2(f)(ii)(B), with supporting calculations." However, neither the draft CAAPP permit nor the SB specifies what the source will include in the "supporting calculations." The permit record does not show sample calculations or equations to illustrate how the source will calculate emissions for purposes of generating the required records and for demonstrating compliance with the numerical limits. As discussed above, if the source will use emission factors for periodic monitoring, the permit record must specify the emission factors that the source initially intends to use, how the emission factors were derived, whether the emission factors are indicative of the emissions at the source, or an explanation of why use of the emission factors is adequate to assure compliance with the emission limits.

Ans: The source shall use emission factors from AP-42, Table 3.4-1, for both diesel and dual fuel engines, or Table 3.2-3, for natural gas only engines. Calculating CO emissions based on either hp-hrs or fuel usage (for which the source is required to monitor) will ensure that they remain within the permitted limit of 24.5 tons per month and 245.0 tons per year. In addition, testing is now required in the revised CAAPP Permit, as per Conditions 3.4(a)(ii)(A), 4.1.2(d)(ii)(A), 4.1.2(e)(ii)(A), and 4.1.2(g)(ii)(A). Testing is required of all pollutants should the source reach 50 percent of their CO limit. This limit was chosen based on their actual emissions submitted in their Annual Emission Report (AER). Furthermore, the use of natural gas in dual fuel engine testing provides a reduction in emissions over engines tested only with diesel fuel.

The following are comments from the general public. Comments have been reconfigured into question and answer format. In response to these concerns, the Illinois EPA will be holding a public hearing.

1. Can ARPL be relocated?

Ans: The Illinois EPA understands the source is located in a commercial area. However, this source type does not require siting approval by the Illinois EPA as it is not a pollution control facility (See Section 3.330 of the Act). Thus, local siting and zoning decisions are by the City of East Peoria.

2. Can the status as "testing facility" be changed? Can the Illinois EPA prevent the source from being a "major emitter"?

Ans: The Illinois EPA cannot dictate to sources what business they conduct on their property. Thus, the type of operations cannot be changed.

The Illinois EPA also cannot change the status of "major emitter". What makes a source major or minor is dependent on their potential to emit. The potential to emit is the maximum amount that a source could possibly emit to the atmosphere. If the source's potential to emit exceeds the thresholds set forth in the Clean Air Act Permitting Program (CAAPP), then they are considered a major source. The source has limited their PTE for hazardous air pollutants (HAP) and greenhouse gasses (CO_{2E}) to remain a synthetic minor. Furthermore, the source is considered a natural minor for particulate matter (PM), sulfur dioxide (SO₂), and volatile organic material (VOM).

3. How will the Illinois EPA address noise issues?

Ans: The Illinois EPA has delegated regulations concerning noise to local communities for enforcement. Noise issues have been addressed, and will continue to be addressed, by the City of East Peoria.

4. Will ARPL be limited to the fuels stated in the permit- both quantity and type - and Tier 4 certified engines? Will any testing be exempt from meeting the requirements of fuel type and quantity and engine type (Tier 4 certified) as defined in the permit?

Ans: Ultra Low Sulfur Diesel shall be the only liquid fuel used, as per revised CAAPP Permit Condition 4.1.2(f)(i)(B), and Pipeline Quality Natural Gas shall be the only gas fuel used, as per revised CAAPP Condition 4.1.2(f)(i)(C). As such, they cannot use high sulfur fuels at any time.

Requiring Tier 4 emission controls on engines is outside the authority of the permit. These requirements are found elsewhere in the Federal Rules. Furthermore, removal of emission controls for certain tests does not allow ARPL to violate the emission limits already set forth in the permit. There are no exemptions from any testing for the type of engine being tested.

5. Why is ARPL permitted for 30.7 tons of sulfur dioxide emissions if their requirements are 0.252 ton/year. Can the Permitted Emissions for Fees be reduced to the expected emissions as defined in the operating permit?

Ans: ARPL is not major for sulfur dioxide. The 30.7 tons per year of sulfur dioxide listed in the permit is for fee purposes only. It is not federally enforceable. ARPL is required to pay fees based on these emission limits in the permit, and this fee cannot be lower than actual emissions. ARPL pays fees based on their determination of permitted allowable emissions for fee purposes only. This does not give them the permission to violate any limit or standard. They are required by state law to not exceed 2000 ppm sulfur dioxide, as per 35 Illinois Administration Code 214.301. Furthermore, Ultra Low Sulfur Diesel shall be the only liquid fuel used, as per revised CAAPP Permit Condition 4.1.2(f)(i)(B), and Pipeline Quality Natural Gas shall be the only gas fuel used, as per revised CAAPP Permit Condition 4.1.2(f)(i)(C). For Ultra Low Sulfur Diesel, the sulfur content must not exceed 15 ppm, as per the federal definition found in the Code of Federal Regulations, 40

CFR 80.510(c). Pipeline quality natural gas is one of the cleanest commercial fuels available. The fuel requirements are enforceable, and require recordkeeping to ensure compliance.

Upon further discussion with ARPL, Permitted Emissions for Fees for sulfur dioxide has been reduced to 1.5 tons per year. The 30.7 tons per year of sulfur dioxide was calculated based on the old standard of 500 ppm sulfur content in diesel fuel, and the maximum amount of horsepower hours allowed by construction permits. This calculation was in error. This subsequent calculation reflects the change to the 15 ppm sulfur content standard for Ultra Low Sulfur Diesel Fuel, resulting in a 1.5 tons per year change in the fee schedule.

6. What are the expected emissions of Volatile Organic Material, Particulate Matter, Nitrogen Oxides, and Hazardous Air Pollutants if they are different than the Permitted Emissions for Fees?

Ans: Average emissions should be similar to the Annual Emission Report (AER). Expected emissions could be higher than the average, but they cannot exceed permitted emissions of 8 lbs per hour VOM, 30 percent opacity(for particulate), 180 tons per year NOx, and 5 tons per year HAP.

7. For whatever reason, the table on page 11 of the Statement of Basis does not list permitted limits of CO and CO₂. What are the permitted limits for CO and CO₂? What are the compliance procedures for reducing CO₂?

Ans: The lack of limits of CO and CO_{2e} referred to on page 11 of the Statement of Basis refer to the source's duty to pay fees. These are not considered limits in the traditional sense of allowable emissions. Rather, these are the quantity of emissions the source bases its fees paid to the EPA to maintain the CAAPP Permit. At this time, there are no fees directly associated with CO and CO_{2E}.

At this time, the limits for CO and CO_{2E} are as follows:

Pollutant	Limit	Source
CO	24.5 tpm ¹ and 245.0 tpy ²	Construction Permit #11090046 (Permit Condition 4.1.2(d)(i)(A))
CO _{2E}	19,000 tpy	Construction Permit #11090046 (Permit Condition 3.3(a)(i)(A))

- 1. tpm = tons per month
- 2. tpy = tons per year

At this time, there are no procedures for reducing CO_{2E}. The source is considered synthetic minor for CO_{2E}. However, there are compliance procedures for ensuring CO_{2E} remains under the permitted limit. These compliance procedures are the recordkeeping of Permit Conditions 3.3(a)(ii)(A) and 3.3(a)(ii)(B).

8. Since emission controls are there to primarily reduce NOx and particulate matter(a potential carcinogen) , can their removal time be limited in the permit (e.g. 10% of testing)?

Ans: The Illinois EPA is not permitting the engines that are being tested in the test cells. Rather, the Illinois EPA is permitting the test cells themselves. However, upon review with the source, the number of engines

tested with a particular emission control removed is less than 1 percent of all engines tested in a year's time. Since ARPL's construction and startup, they have only tested one engine without an emission control. To maintain the source's ability to be flexible in testing, this revised draft permit requires ARPL to keep detailed records any time a control is removed from an engine, including results of the impact on emissions, as stated in the revised CAAPP Permit Condition 4.1.2(g)(ii)(B).

In addition, the Illinois EPA has added a reporting mechanism to handle testing of an engine with a Tier level control removed. This reporting has been established as 5 days. The short reporting time and low threshold for reporting based on monthly limits provides for more efficient information exchange in the event of removing a TIER emission control from the engine. This would allow the Illinois EPA to require testing if it was determined that a significant impact would result.

9. **The mechanisms in the permit to monitor the permitted pollutants need to be improved. For example, there is no mention of calibration and/or protection of the meters used to measure the amount of fuel used, nor does there appear to be a requirement for a Continuous Emissions Monitoring System (CEMS) and its periodic calibration. Can these be included?**

Ans: Calibration and maintenance of monitoring equipment has been included in revised CAAPP Permit Condition 3.4(b)(ii)(D).

There are no applicable requirements that require the use of CEMS for monitoring compliance. In addition, CEMS are not the only monitoring that can assure compliance. Therefore, CEMS is not included in the CAAPP Permit.

10. **What is the air quality of East Peoria? How will ARPL contribute to this air quality?**

Ans: To begin responding to your comments, the Clean Air Act requires the EPA to set the National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The NAAQS sets limits for six criteria pollutants—carbon monoxide, lead, nitrogen dioxide, ozone, particulate, and sulfur dioxide. Using these limits, the Illinois EPA utilizes the Prevention of Significant Deterioration (PSD) program to achieve and maintain attainment. In areas where attainment is not achieved, non-attainment New Source Review (NSR) is used to reduce emissions. At this present time, the area that encompasses ARPL is in attainment of the NAAQS. Furthermore, the Illinois EPA complies with the air quality standards every year, and publishes it in the Annual Air Quality Report. The current 2011 report, published in November of 2012, summarizes the Peoria Metropolitan Area, which includes East Peoria, as having an Air Quality Index of 68.8% Good, 31.0% Moderate, and 0.3% Unhealthy for Sensitive Groups. At no time in 2011 was the Air Quality Index rated Unhealthy, Very Unhealthy, or Hazardous.

11. **Will the EPA place a monitoring station in East Peoria?**

Ans: Through the Clean Air Act U.S. EPA used their authority to delegate ambient air monitoring to the states; Illinois EPA's network of ambient air monitors spans the State of Illinois, each placed in a specific area

as dictated by the National Air Quality Standards. As part of this network, there are multiple ambient monitoring sites located within a 15 miles radius of East Peoria, IL. Currently, Illinois EPA has all available resources devoted their monitoring network in terms of meeting new requirements, availability of equipment, and maintenance and operation of the network. The Network Plan is posted for comment annually each summer in advance of the final copy which is submitted to U.S. EPA in July of each year; we encourage you to contact the state and submit your comments on the Illinois EPA's Annual Network. Illinois EPA's Annual Network Plan can be found at <http://www.epa.state.il.us/air/>.

- 12. The Statement of Basis at page 10, Section 2.5, listed the source as major for hazardous air pollutants (HAPs). Is ARPL a major contributor for HAPs?**

Ans: The Statement of Basis was in error when it stated that the source is considered major for hazardous air pollutant (HAP). ARPL is a synthetic minor, as reflected in the CAAPP Permit, at Condition 3.4(a). A minor source is a source that remains under 10 tons per year of any individual HAP, and 25 tons per year of total combined HAPs. As a synthetic minor, the source has taken limits to ensure that they remain under the 10 tons per year individual and 25 tons per year combined HAP limits. This error has been corrected in the revised Statement of Basis.

- 13. The Statement of Basis reports, but seems to dismiss, previous incidents of ARPL's non-compliance, including lack of construction permits, violations of fuel type usage limitations, exceeding operating hour limits and exceeding monthly and annual emission limits. Is this truly acceptable?**

Ans: The Statement of Basis reports non-compliance issues with the source. ARPL has been cooperating with the Illinois EPA to bring them back into compliance. Construction permits have been issued for construction built without a permit, to enforce monitoring of new systems. Construction permits have also been revised to streamline monitoring, allowing the source to better monitor emissions. Issuance of this CAAPP Permit will finalize resolution of all non-compliance issues, as stated in the Statement of Basis.

Endnotes

- ¹ The federal PSD program, 40 CFR 52.21, applies in Illinois. The Illinois EPA administers PSD permitting for major projects in Illinois pursuant to a delegation agreement with USEPA.
- ² Illinois has a state nonattainment NSR program, pursuant to state rules, Major Stationary Sources Construction and Modification ("MSSCM"), 35 IAC Part 203, which have been approved by USEPA as part of the State Implementation Plan for Illinois.
- ³ Among other things, USEPA observed that the stream-lining benefits can consist of "reduced cost and administrative complexity, and continued compliance flexibility...". *White Paper 2*, page 41.
- ⁴ See, *In the Matter of Tesoro Refining and Marketing*, Petition No. IX-2004-6, Order Denying in Part and Granting in Part Petition for Objection to Permit, at page 8 (March 15, 2005); see also, *White Paper 2* at page 39 ("reference must be detailed enough that the manner in which any referenced materials applies to a facility is clear and is not reasonably subject to misinterpretation").
- ⁵ The Order provides that permit authorities must ensure the following: "(1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of the document is being referenced; and (3) citations, cross references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation." See, *Petition Response* at page 43, citing *White Paper 2* at page 37.
- ⁶ See, *White Paper 2* at page 39.
- ⁷ Nothing in USEPA guidance, including the *White Paper 2* or previous orders responding to public petitions, supports the notion that permit authorities incorporating a document by reference must also restate contents of a given plan in the body of the Title V permit. Such an interpretation contradicts USEPA recognition that permit authorities need not restate or recite an incorporated document so long as the document is sufficiently described. *White Paper 2* at page 39; see also, *In the matter of Consolidated Edison Co. of New York, Inc., 74th St. Station*, Petition No. II-2001-02, Order Granting in Part and Denying in Part Petition for Objection to Permit at page 16 (February 19, 2003).
- ⁸ This approach is consistent with USEPA guidance, which has previously embraced a similar approach to certain SSM plans. See, *Letter and Enclosures*, dated May 20, 1999, from John Seitz, Director of Office of Air Quality Planning and Standards, to Robert Hodanbosi and Charles Lagges, STAPPA/ALAPCO, pages 9-10 of Enclosure B.
- ⁹ Each incorporated plan addressed by this Section of the Statement of Basis is part of the source's permit file. As such, these plans are available to any person interested in viewing the contents of a given plan may do so at the public repository during the comment period or, alternatively, may request a copy of the same from the Illinois EPA under the Freedom of Information Act. See also 71 FR 20447.
- ¹⁰ 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).
- ¹¹ 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."
- ¹² 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.
- ¹³ 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.
- ¹⁴ 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.

¹⁵ 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.

¹⁶ 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).

¹⁷ 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.