

Statement of Basis

for the DRAFT CAAPP Permit for:

Source Name:

Custom Marble, Inc.

Statement of Basis No.: 95120154

I.D. No.: 163085AAH

Permit No.: 95120154

Date Prepared: July 2, 2013

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

Since the last New CAAPP Permit issued on May 19, 2004, the source has not been issued any modifications or amendments.

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.

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 Renewal CAAPP Permit on October 22, 2008. 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.

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 regulation.

40 CFR 63 Subpart WWWW National Emissions Standards for Hazardous Air
Pollutants: Reinforced Plastic Composites Production

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 219 - Organic Material Emis Stnds And Lmtns For The Metro East Area
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: 3088, Plastic Plumbing Fixtures
County: St. Claire

The source produces various polymer resin cast products, using the solid casting process. The facility is engaged in the following operations: Open molding (gel-coat), mixing, polymer casting, maintenance cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations on parts manufactured at the source. (See Sections 4.1.1 and 6.1)

The source contains the following polyester resin product manufacturing processes:

<i>Emission Units</i>	<i>Description</i>
Open Molding:	Gelcoat Booth- with non-atomized gelcoat applicator, PM filter (Gruber Model 16 with Binks Andre Filter) and hot water radiant heated curing oven. Maintenance cleaning
Mixing and Casting Operations	<u>Batch Casting:</u> open vessel method (Gruber Model 350 and Marmax Model 250 Batch Mixers) <u>Continuous Casting:</u> (GISCO Model AM-40 mixer) <u>Solid Surface Casting - Closed Vessel Mixing:</u> Closed vessel vacuum batch mixing (Gruber Model 250 and Gruber GE 1700 (375 lb) vacuum batch mixers) With maintenance cleaning, casting and mold storage areas, and a electrically heated curing oven
6,400 Gallon Aboveground Storage Tank	Primary polyester resin storage

The process description:

Set Up Area:

The molds are cleaned using compressed air and small amounts of mold cleaner. Waxing and application of semi-permanent release coatings are applied during this step. Molds with bowls have drain and overflow assemblies added. Special custom adaptations area added by using modeling clay, wax, and polyethylene bars. Negligible VOM and HAP emissions are expected.

Open Molding and Gel Coat Curing Oven:

Clean molds are moved to the gel coat spray booth (Gruber Model 16 with Binks Andre Filter), where a thin layer of non-vapor-suppressed gel coat is applied with a non-atomizing applicator gun (Binks Model 102-3610 Century). Up to 12 linear feet of molds are transferred into the spray booth at one time. Three

to four applications of gel coat are sprayed on the mold to achieve a total wet film thickness of 20-25 mills. The gel coat layer creates the surface layer of the cast polymer parts.

The gelcoat booth's VOM, HAP and PM emissions are vented through the PM filter and out the gelcoat booth's 32-inch stack (15,300 cfm tube-axial fan).

From the spray booth, the molds are transferred directly to the hot water radiant heated curing oven. The molds spend about 20 to 25 minutes in the oven while the liquid polyester gel coat polymerizes. Molds can be added to and removed from the oven on a continuous basis. VOM/HAP emissions from the oven pass freely to the general shop area where it is emitted outside via the ventilation system or through the gelcoat spray booth stack. Hot water is supplied by the four natural gas fired boilers shown below and in Section 6.0 (Insignificant Activities Requirements) of the permit.

Casting/Mixing Area:

From the curing ovens, the molds are transferred to the casting lines. As this transfer is occurring, the matrix, consisting of polyester vapor-suppressed resin and fillers, is being prepared in one of three following methods:

- **Batch Casting method**, open vessel method (Gruber Model 350 and Marmax Model 250 Batch Mixers): Polyester resin is piped from the outside tank to an open topped mixing vessel, Catalyst, color pigments and filler materials are added to the batch as per product specifications. Veining color pigments are added to the mix, if required, just before the end of the mixing process. The entire batch mixing operation is 12-15 minutes in length. Small amounts of VOM/HAP and PM are emitted during batch formulation and mixing. The resulting casting matrix is either then directly put into a clean cured gel coat coated mold or it is scooped into a mold by hand.
- **Continuous Casting Mixing method** (GISCO Model AM-40 mixer): The continuous mixer is a closed spiral screw type mixer which operates at the rate of up to 40 pounds of matrix per minute. The matrix is formulated as follows: Polyester resin is piped from the outside tank to a closed heat exchanger; from there the heated resin is metered into the mixing screw; catalyst and colored pigments are then piped into the mixing screw via a closed piping system; fillers are then augured into the mixing screw via another closed piping system; and finally, veining color pigments, if required, are pumped into the mixing screw. The resulting matrix is either then directly put into a clean cured gel coat coated mold or onto to a pan from which it is scooped into a mold by hand. Since this process is continuous, the mixing operation varies in length dependent upon the amount of casting matrix with a particular color needed per day. VOM/HAP emissions are expected to be small due to the speed and closed characteristics of the mixer.
- **Solid Surface Casting** - Closed Vessel Mixing, vacuum batch mixing (Gruber Model 250 and Gruber GE 1700 (375 lb) vacuum batch mixers): Vacuum batch mixers are used to formulate solid surface casting matrix. These products are not gel coated but are cast directly onto a mold. The molds are transferred directly from the set-up area to the casting lines, skipping the gel coat spray booth, and curing oven step. The first step of the casting matrix formulation process starts with the weighing of polyester resin, piped from the outside tank, in the mixing vessel and

then moving the vessel to the mixer. Catalyst and background color pigments are added, the lid is lowered, and the mixer and vacuum pump is turned on. Pressure inside the mixing vessel is drawn down to 26 inches of mercury and mixing proceeds for 4 minutes. The mixer and vacuum pump are then turned off and the lid is raised. Fillers are added, the mixer is closed, and mixer and vacuum pump are turned for eight minutes. The mixer and vacuum pump are then turned off and the lid is removed. The sides of the vessel and the mixing blade are scraped to remove any unmixed dry filler. The mixer is again closed, and the mixer and vacuum pump is turned on for a final four minutes. The mixer and vacuum pump are then turned off and the lid is raised. The mixing vessel is then taken to the casting line and the and the casting resin is applied to the non-gel coat coated molds.

Thirty to forty-five minutes after mixing begins, the casting resin mixture will polymerize and begin to heat up through an exothermic process and cure. Curing occurs both in the casting area, on the mold storage areas, and in a electrically heated curing oven. The heavier than air, VOM/HAP emissions moves laterally out of the shop through either open doors or the shop ventilation system. All VOM/HAP emissions cease after the curing is complete which is within 4 hours of the start of process.

Insignificant Activities - Section 6.0:

Hot water is supplied to the source by the four natural gas fired 0.3 mmBtu/hr Hydronic hot water heaters, which are used for comfort heating (85%) and for the radiant heated curing oven. Pursuant to 35 IAC 201.210(a)(4), these emission units are classified as insignificant.

Note: These units are not subject to 40 CFR 63 Subpart DDDDDD, based upon the units meeting the definition of a "hot water heater" in 40 CFR 63.7575, because the heat recovered from the units is used primarily for comfort heating, see exclusion from definition for "process heater" in 40 CFR 63.7575, and because hot water heaters are listed as boilers or process heaters not subject to 40 CFR 63 Subpart DDDDDD in 40 CFR 63.7491.

The products are demolded, moved to the sanding and grinding area where they are sanded and polished with manually operated equipment. The demolding, sanding, and polishing do not release VOM or HAP and the negligible PM emissions are classified as insignificant pursuant to 35 IAC 201.210(b).

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 (moderate nonattainment) and/or PM_{2.5} and attainment or unclassifiable for all other criteria pollutants (carbon monoxide, lead, nitrogen dioxide, PM₁₀, and 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: hazardous air pollutant (HAP).

This source is considered a natural minor for the following regulated pollutants: PM₁₀, PM_{2.5}, nitrogen oxides (NO_x), volatile organic material (VOM), carbon monoxide (CO), and sulfur dioxide (SO₂).

Based on available data, this source is not a major source of emissions for GHG, because the estimated potential emissions of GHG that are less than 100 ton per year (mass) and 100,000 tons per year (CO₂e). Custom Marble, Inc. submitted data in its application for which the Illinois EPA estimated the PTE of GHG emissions to be 62.79 tons per year. The emissions consist of 62.79 tons of CO₂, 0.00 tons of N₂O, and 0.00 tons of methane.

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

2.6 Annual Emissions

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

<i>Pollutant</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
CO	----	----	----	----	----
NO _x	----	----	----	----	----
PM	0.20	0.20	0.20	0.20	0.20
SO ₂	----	----	----	----	----
VOM	5.77	4.06	3.72	4.75	4.442
CO _{2E}	----	----	----	----	----
HAP (Styrene)	5.77	4.06	3.72	4.75	4.442

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)	21.09
Sulfur Dioxide (SO ₂)	----
Particulate Matter (PM)	2.08
Nitrogen Oxides (NO _x)	----
HAP, not included in VOM or PM (HAP)	----
Total	23.17

2.8 SIP Permit Facts (T1 Limits)

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

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

- Previously Incorporated Construction Permits:

<i>Permit No.</i>	<i>Date Issued</i>	<i>Subject</i>
02070030	September 17, 2002	New Resin Mixing Machine and Electric Curing Oven

- 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

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

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

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

3.4 Field Inspection Results

A review of the source's latest field inspection report 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 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)
Volatile Organic Material (35 IAC 219.187)	Applicable Limit	See the Permit, Condition 3.1(b)
HAP (40 CFR 63 Subpart WWW)	Applicable Standard	See the Permit, Condition 3.1(c)

Visible Emissions (i.e., Opacity)

- ✓ Monitoring as follows (Condition 3.1(a)(ii))
 - o If required, daily observations for a week of PM emissions

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- The source has a substantial margin of compliance.
- 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.
- Monitoring is consistent with other sources in this source category.

Volatile Organic Material

- ✓ Recordkeeping as follows (Condition 3.1(b)(ii))
 - o Recordkeeping to demonstrate non-applicability of the material and control requirements shown in 35 IAC 219.187 based upon solvent VOM emissions from the facility being less than the 500 lbs per calendar month threshold.

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- The source has a substantial margin of compliance.
- 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.
- Monitoring is consistent with other sources in this source category.

NESHAP Standards

40 CFR 63 Subpart WWWW – National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.

- ✓ Monitoring:
 - o Operational specific requirements shown in Section 4.0
- ✓ Recordkeeping:
 - o Operational specific requirements shown in Section 4.0
- ✓ Reporting (Condition 3.5(d)):
 - o Semiannual compliance and deviation reports, required pursuant to 40 CFR 63 Subpart WWWW, must be based upon the emission unit and/or operational specific monitoring and recordkeeping requirements specified in Section 4.0 (Section 39.5(7)(f) of the Act)
 - o 15 day notification if any information submitted in any 40 CFR 63 Subpart WWWW notification changes (40 CFR 63.5905);
 - o Semiannual compliance and deviation reports, pursuant to 40 CFR 63.5910(a) through (i) and Table 14 of 40 CFR 63 Subpart WWWW

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Presumed by rule as the source is subject to a standard promulgated after Nov. 1990.
- The source has a substantial margin of compliance.
- 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.

- Monitoring is consistent with other sources in this source category.

3.7 Emission Unit Justifications and Rationale

a. Open Molding Operation (Gelcoat Booth)		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123(a))	Applicable Standard	See the Permit, Condition 4.1.2(a)(i)(A)
PM Requirement (35 IAC 212.321(a))	Applicable Standard	See the Permit, Condition 4.1.2(b)(i)(A)
VOM Requirement (35 IAC 219.301)	Applicable Standard	See the Permit, Condition 4.1.2(c)(i)(A)
HAP Requirement (40 CFR 63 Subpart WWWW)	Applicable Standard	See the Permit, Condition 4.1.2(d)(i)(A)

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 (Condition 4.1.2(a)(ii)(B)):
 - o Records of each Method 22 observation
 - o Records of any corrective action
 - 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:

- The source has a substantial margin of compliance.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Emissions are considered negligible

Particulate Matter Emission

- ✓ Monitoring as follows (Condition 4.1.2(b)(ii)(A))
 - o Monthly inspections
- ✓ Recordkeeping as follows (Condition 4.1.2(b)(ii)(B)):
 - o Records of inspections
 - o Records for prompt repair of defects
 - o Demonstration of compliance based upon either each affected emission unit's average hourly PM emission rate or maximum hourly potential to emit, including copies of all data, assumptions, and calculations used to determine PM emissions for each emission unit.
- ✓ 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:

- The source has a substantial margin of compliance.
- There is a small likelihood of an exceedance.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Emissions are considered negligible

Volatile Organic Material Emission

- ✓ Recordkeeping as follows (Condition 4.1.2(c)(ii)(A)):
 - o Daily and monthly records of the hours of operation;
 - o Quantity and the VOM content of VOM material used in each affected emission unit (lb/mo and lb/yr; and
 - o Monthly demonstration of compliance with all data, assumptions, and calculations used to show compliance

- ✓ Reporting as follows (Condition 4.1.5):
 - o Prompt reporting within 30 days (39.5(7)(f)(ii) of the Act)
 - o Other Reporting
 - Exceedance of the 35 IAC 219 Subparts PP, QQ, or TT exemption thresholds (See Non-applicability statement in Condition 4.1.3(b)) within 30 days of IEPA request (35 IAC 219.990)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- The source has a substantial margin of compliance.
- 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.

Hazardous Air Pollutant (HAP) Emissions

- ✓ Monitoring as follows (Condition 4.1.2(d)(ii)(A))
 - o Compliance with applicable HAP emission limits and work practices (40 CFR 63.5900(a)(2) and (4));
 - o Monthly work practices compliance verification inspection (39.5(7)(b) and (d)(ii)); and
 - o Organic HAP content of resins, gel coats and fresh solvents (40 CFR 63.5797 and 39.5(7)(b) and (c) of the Act).

- ✓ Recordkeeping as follows (Condition 4.1.2(d)(ii)(C)):
 - o Resin and gel coat usage, organic HAP content (40 CFR 63.5895(c) and (d));
 - o 40 CFR 63 Subpart WWWW notifications and reports; (40 CFR 63.5915(a)(1))
 - o Data, assumptions, and calculations (40 CFR 63.5915(c));
 - o Compliance certification statement (40 CFR 63.5915(d));
 - o Work Practice Compliance Records (Section 39.5(7)(b) and (e) of the Act)

- Cleaning solvents usage; organic HAP content,;
- Inspections Records; and
- Maintenance log for covers on vats, vessels, and tanks.

- ✓ Reporting as follows (Condition 3.5(d) and 4.1.5):
 - 15 day notification if any information submitted in any 40 CFR 63 Subpart WWWW notification changes (40 CFR 63.5905); and
 - Semiannual compliance and deviation reports (40 CFR 63.5910(a) through (i) and Table 14 of 40 CFR 63 Subpart WWWW)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Presumed by rule as the source is subject to a standard promulgated after Nov. 1990.
- 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.
- Monitoring is consistent with other sources in this source category.

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 8.

b. Polyester Resin Product Manufacturing Processes		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
Opacity Requirement (35 IAC 212.123(a))	Applicable Standard	See the Permit, Condition 4.2.2(a)(i)(A)
PM Requirement (35 IAC 212.321(a))	Applicable Standard	See the Permit, Condition 4.2.2(b)(i)(A)
VOM Requirement (35 IAC 219.301)	Applicable Standard	See the Permit, Condition 4.2.2(c)(i)(A)
VOM Requirement (Construction Permit 02070030)	Limit	See the Permit, Condition 4.2.2(c)(i)(B)
HAP Requirement (40 CFR 63 Subpart WWWW)	Applicable Standard	See the Permit, Condition 4.2.2(d)(i)(A)

Visible Emissions (i.e., Opacity)

- ✓ Monitoring as follows (Condition 4.2.2(a)(ii)(A))
 - Annual Method 22 observations
 - If required. Method 9 measurements
- ✓ Recordkeeping as follows (Condition 4.2.2(a)(ii)(B)):
 - Records of each Method 22 observation

- o Records of any corrective action
 - 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:

- The source has a substantial margin of compliance.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Emissions are considered negligible

Particulate Matter Emission

- ✓ Monitoring as follows (Condition 4.2.2(b)(ii)(A))
- o Monthly inspections
- ✓ Recordkeeping as follows (Condition 4.2.2(b)(ii)(B)):
- o Records of inspections
 - o Records for prompt repair of defects
 - o Demonstration of compliance based upon either each affected emission unit's average hourly PM emission rate or maximum hourly potential to emit, including copies of all data, assumptions, and calculations used to determine PM emissions for each emission unit.
- ✓ Reporting as follows (Condition 4.2.5(a)):
- o Prompt reporting within 30 days

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- The source has a substantial margin of compliance.
- There is a small likelihood of an exceedance.
- Source has not exhibited a history of non-compliance.
- Monitoring is consistent with other sources in this source category.
- Emissions are considered negligible

Volatile Organic Material Emission

- ✓ Recordkeeping as follows (Condition 4.2.2(c)(ii)(A))
- o Daily and monthly records of the hours of operation;
 - o Quantity and the VOM content of VOM material used in each affected emission unit (lb/mo and lb/yr; and
 - o Monthly demonstration of compliance with all data, assumptions, and calculations used to show compliance
- ✓ Reporting as follows (Condition 4.2.5):
- o Prompt reporting within 30 days (39.5(7)(f)(ii) of the Act)
 - o Other Reporting

- Exceedence of the 35 IAC 219 Subparts PP, QQ, or TT exemption thresholds (See Non-applicability statement in Condition 4.2.3(a)) within 30 days (35 IAC 219.990)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- The source has a substantial margin of compliance.
- 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.

Hazardous Air Pollutant (HAP) Emissions

- ✓ Monitoring as follows (Condition 4.2.2(d)(ii)(A))
 - Compliance with applicable work practice (40 CFR 63.5900(a)(4));
 - Monthly work practices compliance verification inspection (39.5(7)(b) and (d)(ii)); and
 - Organic HAP content of fresh solvents (39.5(7)(b) and (c) of the Act).
- ✓ Recordkeeping as follows (Condition 4.2.2(d)(ii)(B)):
 - 40 CFR 63 Subpart WWWW notifications and reports; (40 CFR 63.5915(a)(1))
 - Compliance certification statement (40 CFR 63.5915(d));
 - Work Practice Compliance Records (Section 39.5(7)(b) and (e) of the Act)
 - Cleaning solvents usage and organic HAP content,;
 - Inspections Records; and
 - Maintenance log for covers on vats, vessels, and tanks.
- ✓ Reporting as follows (Conditions 3.5(d) and 4.2.5):
 - 15 day notification if any information submitted in any 40 CFR 63 Subpart WWWW notification changes (40 CFR 63.5905)
 - Semiannual compliance and deviation reports (40 CFR 63.5910(a) through (i) and Table 14 of 40 CFR 63 Subpart WWWW)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Presumed by rule as the source is subject to a standard promulgated after Nov. 1990.
- 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.
- Monitoring is consistent with other sources in this source category.

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 8.

c. 6,400 Gallon Aboveground Storage Tank		
Applicable Requirements Summary		
Applicable Requirement	Type	Location
VOM Requirement (35 IAC 219.122(b)) Submerged loading	Applicable Standard	See the Permit, Condition 4.3.2(a)
HAP Requirement (40 CFR 63 Subpart WWWW)	Applicable Standard	See the Permit, Condition 4.3.2(b)

Volatile Organic Material Emission

- ✓ Monitoring as follows (Condition 4.3.2(a)(ii)(A))
 - o Semi-annual compliance inspections (Condition 4.3.2(a)(ii)(A)):
- ✓ Recordkeeping as follows (Condition 4.3.2(a)(ii)(B)):
 - o Section 39.5(7)(b) and (e) of the Act
 - Design information for the tanks showing the presence of a permanent submerged loading pipe;
 - Semi-annual compliance inspections;
 - Maintenance and repair records, as related to the repair or replacement of the submerged loading pipe.
- ✓ Reporting as follows (Condition 4.3.5):
 - o Prompt reporting within 30 days (39.5(7)(f)(ii) of the Act)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for this emission unit because:

- The source has a substantial margin of compliance.
- 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.
- Monitoring is consistent with other sources in this source category.

Hazardous Air Pollutant (HAP) Emissions

- ✓ Monitoring as follows (Condition 4.3.2(b)(ii)(A))
 - o Compliance with applicable work practices (40 CFR 63.5900(a)(4));
 - o Monthly work practices compliance verification inspection (39.5(7)(b) and (d)(ii)); and
- ✓ Recordkeeping as follows (Condition 4.3.2(d)(ii)(C)):
 - o 40 CFR 63 Subpart WWWW:
 - Pursuant to 40 CFR 63.5915:
 - 40 CFR 63 Subpart WWWW notifications and reports;
 - Data, assumptions, and calculations; and

- Certification statement that the source is in compliance with the work practice requirements in Condition 4.1.2(d)(i)(A)(IX)(1) and Table 4 to 40 CFR 63 Subpart WWWW.
 - Pursuant to Section 39.5(7)(b) and (e) of the Act:
 - Records of inspections verifying compliance with the work practice standard requirements in Condition 4.1.2(d)(i)(A)(IX)(1) and Table 4 to 40 CFR 63 Subpart WWWW (i.e., verification that all containers that store HAP-containing materials are completely closed or covered); and
 - Maintenance log for covers on the tank, detailing all routine and non-routine maintenance performed and initial use of new covers, including dates of such activities.
- ✓ Reporting as follows (Condition 3.5(d) and 4.3.5):
 - o 15 day notification if any information submitted in any 40 CFR 63 Subpart WWWW notification changes (40 CFR 63.5905)
 - o Semiannual compliance and deviation reports (40 CFR 63.5910(a) through (i) and Table 14 of 40 CFR 63 Subpart WWWW)

Rationale and Justification for Periodic Monitoring

Periodic Monitoring is sufficient for these emission units because:

- Presumed by rule as the source is subject to a standard promulgated after Nov. 1990.
- 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.
- Monitoring is consistent with other sources in this source category.

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 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 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.³ Section 39.5(7)(b) of the Illinois Environmental Protection Act⁴ 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.^{5, 6} 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.^{7, 8} 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.⁹ 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.¹⁰

CHAPTER IV - CHANGES FROM PREVIOUSLY ISSUED CAAPP PERMITS

4.1 Major Changes Summary

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

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

4.2 Specific Permit Condition Changes

The permit differs from the previous CAAPP permit in that it incorporates the applicable requirements of 40 CFR 63 Subpart DDDDD and WWWW and it addresses the sources applicability and exclusion from the VOM control requirements of 35 IAC 219.187.

Endnotes

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

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

³ The 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).

⁴ 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."

⁵ 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.

⁶ 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.

⁷ 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.

⁸ 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.

⁹ 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).

¹⁰ 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.