

217/782-2113

"REVISED"  
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Ineos Silicas Americas, LLC  
Attn: Steven M. Doll, Safety, Health and Environmental Manager  
101 Ingalls Avenue  
Joliet, Illinois 60435

Application No.: 96030053                      I.D. No.: 197045ABO  
Applicant's Designation: INDINORCHEM              Date Received: March 6, 1996  
Operation of: Industrial Inorganic Chemicals Mfg.  
Date Issued: January 10, 2003                      Expiration Date: January 10, 2008  
Source Location: 101 Ingalls Avenue, Joliet, Will  
Responsible Official: Steven M. Doll

This permit is hereby granted to the above-designated Permittee to OPERATE Process Emission Sources 1 and 2, Fusing Furnaces 1 and 2, Fuel Combustion Units, Zeolite Boiler (NSPS Source), and a Fuel Oil Storage Tank pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: January 14, 2004  
Revision Date Issued: TO BE DETERMINED  
Purpose of Revision: Significant Modification

This significant modification seeks to: increase the process with rate limit for gel plant ring dryers in Condition 7.1.6(a) from 30,660 T/yr to 40,300 T/yr, increase the process weight rate limit for the three gel mills in Condition 7.1.6 from 9,000 T/yr to 13,000 T/yr, and to increase the PM emission limitation for the gel mills of Condition 7.1.6 to 0.88 T/yr. Language pertaining to the construction/modification of a Gel Dryer from Permit 04010025 has also been incorporated into this modification of the Title 5 permit.

If you have any questions concerning this permit, please contact Sunil Suthar at 217/782-2113.

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

ECB:SIS:psj

cc: Illinois EPA, FOS, Region 1

<sup>1</sup> Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Ineos Silicas Americas, LLC  
101 Ingalls Avenue  
Joliet, Illinois 60435  
815/774-2761

I.D. No.: 197045ABO  
Standard Industrial Classification: 2819, Industrial Inorganic  
Chemicals

1.2 Owner/Parent Company

Ineos Silicas Americas, LLC  
101 Ingalls Avenue  
Joliet, Illinois 60435

1.3 Operator

Ineos Silicas Americas, LLC  
101 Ingalls Avenue  
Joliet, Illinois 60435

Steven M. Doll  
815/774-2762

1.4 General Source Description

Ineos Silicas Americas, LLC is located at 101 Ingalls Avenue, Joliet. The source is classified as Industrial Inorganic Chemicals Manufacturing. Emission sources at the facility consist of: Micronized Gel Production, Hydrogel Production, Fusing Feed, Fusing Furnaces 1 and 2, Grinding Classification, Zeolite Production, and Silicate Dissolving.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

- a. This permit contains "Title I conditions" that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."
- b. This permit contains Title I conditions that revise Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1R."
- c. This permit contains Title I conditions that are newly established in this CAAPP permit, which conditions are specifically designated as "T1N."

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
ft <sup>3</sup>	Cubic feet
°F	Degree Fahrenheit
gal	gallon
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kg	kilogram
kW	kilowatts
l	liter
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
MBtu	Million British thermal units
mmBtu	Million British thermal units
mo	month
MW	Megawatt
m <sup>3</sup>	Cubic meter
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
TOC	Total organic compound
T1	Title I - identifies Title I conditions that have been carried over from an existing permit

T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile organic liquid
VOM	Volatile Organic Material
VPL	Volatile petroleum liquid
yr	year

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

Nitric Acid Totes - Zeolite Building  
Aluminum Trihydrate (ATH) Storage Pile - Zeolite Building

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

None

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

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

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

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

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous

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

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

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

### 3.2 Compliance with Applicable Requirements

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

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 218.182.

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

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 3.3 Addition of Insignificant Activities

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

- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed/Modified	Emission Control Equipment
Unit 01: Process Emission Unit 1	Micronized Silica Gel Manufacturing:	7/1991	
	Gel Ring Dryers S1, S2*	2004	Dust Collectors: GDC701, GDC721
	Gel Mills (3)		Dust Collectors: GDC804, GDC824, GDC854
	Hydrogel Production: ACM Mill/Classifier Product Bagger (Packer)	7/1988	Collectors and Final Filter (for Mill/Classifier & Product Bagger)
	Packaging Room Emissions		Dust Collectors and Final Filter (for nuisance dust in packaging room)
	Rip-tip bag cutter	1973	Dust Collector for rip-tip bag cutter (venting inside, not to atmosphere)
	Fusing Feed	1961	Micropul Feed Baghouse
	Grinding and Classification	1992	Baghouse #2
	Dissolvers		Condenser _ "C" (only used for water vapor, letdown from dissolvers), W.W. Sly Impinjet 2 Stage Scrubber
Unit 02: Fusing Furnace 1 and 2	Furnace, Natural Gas Fired Maximum Heat Input Capacity: 20 MBtu/hr	1961	Venturi Model # 6 High Energy Scrubber Total of (2) Scrubbers
	Fusing Furnace #2, Natural Gas Fired Maximum Heat Input Capacity: 25 MBtu/hr	1961	
Unit 03: Process Emission Source 2	Drymet 59 Production	1967	Centrifugal Cyclone Collector, High Efficiency Impinjet Scrubber
	Crystamet Production	1961	Model 165 Scrubber w/2 Demister 014 Mesh Units
	Zeolite Production	1991	Loadout Baghouse Filter, BW Dust Collectors for Silos, FlexKleen Jet Baghouse for Dryer

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 04: Fuel Combustion Units	Natural Gas Fired Boiler 2	1961	None
	Natural Gas Fired Boiler 3	1961	None
	Natural Gas Fired Boiler 5	1964	None
	Warehouse Heater	Unknown	None
Unit 05: Zeolite Boiler (NSPS Source)	Natural Gas Fired Zeolite Boiler (40 MBtu/hr Heat Input Capacity)	1991	None
Unit 06: Fuel Oil #2 Storage Tank	Tank/w Storage Capacity of 7,600 Gallons	6/86	Permanent Submerged Loading Pipe
Unit 07: Fugitive Emissions	Fugitive Emissions from: Hydrogel Process, Micronized Gel Process, and Roof-Furnace Building	---	---

\* Modified per Construction Permit 04010025

## 5.0 OVERALL SOURCE CONDITIONS

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

This permit is issued based on the source requiring a CAAPP permit as a major source of NO<sub>x</sub> and PM emissions.

This permit is issued based on the source not being a major source of HAPs.

### 5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (CO, lead, NO<sub>2</sub>, ozone, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>).

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for Ozone and attainment or unclassifiable for all other criteria pollutants.

### 5.3 Applicable Regulations

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

5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the Zenith at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.3.3 Fugitive Particulate Matter Operating Program

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and

submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

#### 5.3.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.3.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

#### 5.3.6 Future Emission Standards

- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

#### 5.3.7 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans

shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section.

#### 5.3.8 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 5.4 Non-Applicability of Regulations of Concern

None

#### 5.5 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

#### 5.6 Source-Wide Emission Limitations

##### 5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	8.7
Sulfur Dioxide (SO <sub>2</sub> )	15.1
Particulate Matter (PM)	97.1
Nitrogen Oxides (NO <sub>x</sub> )	92.5
HAP, not included in VOM or PM	---
Total	213.4

5.6.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.6.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 General Recordkeeping Requirements

5.7.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.7.2 Records for Operating Scenarios

N/A

5.7.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and

shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

## 5.8 General Reporting Requirements

### 5.8.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

### 5.8.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

## 5.9 General Operational Flexibility/Anticipated Operating Scenarios

N/A

## 5.10 General Compliance Procedures

### 5.10.1 General Procedures for Calculating PM, NO<sub>x</sub>, SO<sub>2</sub>, and VOM Emissions

Compliance with the source-wide emission limits specified in Condition 5.6 shall be based on the recordkeeping and reporting requirements of Conditions 5.7 and 5.8, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

## 6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

### 6.1 Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

### 6.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year

being less than 10 tons and the source's baseline emissions also being less than 10 tons.

### 6.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
  - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
  
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

## 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Unit 01: Process Emission Unit 1 Control: Dust Collectors

#### 7.1.1 Description

##### Micronized Silica Gel Manufacturing:

Micronized Silica Gel produced by reacting sodium silicate with sulfuric acid; in washing operation, forms silica slurry, which is dewatered, dried, milled to desired particle size, de-aerated, and packaged.

##### Hydrogel Production:

Raw materials sulfuric acid and sodium silicate are mixed (at specified concentration, temperature, composition and flowrate). The gel is then cut, washed, milled, then packed.

##### Fusing Feed:

Soda ash is received from RR car; silica sand received from trucks; both are stored in silos, and then mixed at appropriate ratio for feed into Furnace #1 and 2.

##### Grinding and Classification:

Sodium Metasilicates fused in Fusing Furnace No. 1 are transported via screw conveyor and bucket elevator to a grind feed bin (flake bin), and then to a grinder. From the grinder, the material is sent to a classifier, which separates the sodium metasilicates by grain size. Some of the material is stored in one of six storage bins, while the larger particle size material is recycled back to the grinder.

##### Dissolvers:

Glass from Fusing Furnace No. 2 is conveyed to one of three dissolvers. Water and steam are added to the dissolver, and glass is dissolved under proper temperature and pressure conditions.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 01	Micronized Silica Gel Manufacturing:	7/1991	
	Gel Ring Dryers S1, S2*	2004	Dust Collectors: GDC701, GDC721
	Gel Mills (3)		Dust Collectors: GDC804, GDC824, GDC854
	Hydrogel Production: ACM Mill/Classifier Product Bagger (Packer)	7/1988	Collectors and Final Filter (for Mill/Classifier & Product Bagger)
	Packaging Room Emissions		Dust Collectors and Final Filter (for nuisance dust in packaging room)
	Rip-Tip Bag Cutter	1973	Dust Collector for rip-tip bag cutter (venting inside, not to atmosphere)
	Fusing Feed	1961	Micropul Feed Baghouse
	Grinding and Classification	1992	Baghouse #2
	Dissolvers		Condenser - "C" (only used for water vapor, letdown from dissolvers), W.W. Sly Impinjet 2 Stage Scrubber

\* Modified per Construction Permit 04010025

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected process emission unit 1", for the purpose of these unit-specific conditions, are the units described in 7.1.1 and 7.1.2.
- b. The affected process emission unit 1 is subject to the emission limits identified in Condition 5.3.2.

- c. The affected process emission unit 1 (specifically the Fusing Feed) is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322. (See also Attachment 1) [35 IAC 212.322(a)]

- d. The affected process emission unit 1 (specifically Micronized Silica Gel Manufacturing, ACM Mill/Classifier Product Bagger (Packer), Rip-tip bag cutter, Grinding and Classification) is subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced on or after April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321. (See also Attachment 2) [35 IAC 212.321(a)]

7.1.4 Non-Applicability of Regulations of Concern

N/A

7.1.5 Operational and Production Limits and Work Practices

The production for the dryer (S2) shall not exceed 40,300 tons/year.

7.1.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, the affected process emission unit 1 is subject to the following:

<u>Item of Equipment</u>	<u>Process Weight Rate</u>		<u>Particulate Matter Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Mo)</u>	<u>(T/Yr)</u>
Gel Plant Mill (GQ853)	540	6,500	74	0.88
Gel Plant Ring Dryers	2,555	40,300	74	0.44
Gel Plant Mill (GM801 & GM821)	540	6,500	74	0.88

These limits are based on maximum process weight rate and 99.9% control efficiency of baghouse. Compliance with annual limits shall be determined by adding emissions from the present month to the emissions of the 11 preceding months. [T1R]

The above limitations contain revisions to previously issued Permit 91080071. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary compliance assurance mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the process weight rate limit on the two gel plant dryers were increased from 30,660 T/yr to 40,300 T/yr. The process weight rate for the three gel mills was increased from 9,000 T/yr to 13,000 T/yr. The PM emissions rate on three gel mills was also increased from 0.44 T/yr to 0.88 T/yr [T1R].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

- b. Emissions of carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>) and particulate matter (PM) from the micronized silica gel ring dryer (S2) shall not exceed the following limits:

CO		NO <sub>x</sub>		PM	
<u>(Lbs/Hr)</u>	<u>(T/Yr)</u>	<u>(Lbs/Hr)</u>	<u>(T/Yr)</u>	<u>(Lbs/Hr)</u>	<u>(T/Yr)</u>
0.50	2.2	0.60	2.6	0.55	2.4

The above limitations were established in Permit 04010025, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR

52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.1.7 Operating Requirements

At all times the Permittee shall operate equipment in accordance with good air pollution control practices.

7.1.8 Inspection Requirements

Monthly inspections of the dust collectors.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.7, the Permittee shall maintain records of the following items for the affected process emission unit 1 to demonstrate compliance with 5.6.1, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Process Weight Rate (monthly and yearly).
- b. Records addressing use of good operating practices for the bag collectors:
  - i. Records for periodic inspection of the bag collectors with date, name of individual performing the inspection, and the nature of the inspection.
  - ii. Records of prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- c. Monthly and aggregate annual PM emissions from the affected process emission unit 1 shall be maintained, based on engineering estimates and operating hours (as indicated in the Title V application), with supporting calculations.
- d. The Permittee shall keep records of the CO, NO<sub>x</sub> and PM emissions, lb/months and tons/year for the dryer (S<sub>2</sub>).

- e. Hours of operation for the gel plant ring dryers and gell plant mills.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected process emission unit 1 with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of PM in excess of the limits in Condition 7.1.3 or 7.1.6 within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance of the affected process emission unit 1 with Condition 7.1.3(c) is addressed by the records required in Conditions 7.1.9.
- b. Compliance of the affected process emission unit 1 with Condition 7.1.3(d) is addressed by the records required in Conditions 7.1.9.
- c. Compliance of the affected process emission unit 1 with Condition 7.1.6(a) is addressed by the records required in Conditions 7.1.9(a) and (c).
- d. Compliance of the affected process emission unit 1 with Condition 7.1.6(b) is addressed by the records required in Conditions 7.1.9(d).

7.2 Unit 02: Fusing Furnaces 1 and 2  
Control: Venturi Model #6 High Energy Scrubber

7.2.1 Description

Fusing Furnace 1:

Fusing Furnace No. 1 produced sodium metasilicates anhydrous through the fusion of sand and soda ash at crown temperatures between 2,150 and 2200°F. Sand and soda ash are stored in silos. Raw material from the silos is conveyed to a batching system where the sand to soda ash ratio is controlled prior to being charged to the furnace. Fuel oil and filter cake from cystamet are added to the No. 1 Furnace batches to increase heat input and reduce dusting. Heat input to the furnace is natural gas. The fused product from the No. 1 Furnace is cooled and conveyed to a storage bin. Sodium metasilicates from Fusing Furnace No. 1 are used in the DM59 and cystamet operations.

Fusing Furnace 2:

Fusing Furnace No. 2 produced neutral glass by the fusion of sand and soda ash at crown temperatures above 2,300°F and bottom temperatures above 2,000°F. Sand and soda ash are stored in silos. Raw material from the silos is conveyed to a batching system where the sand to soda ash ratio is controlled prior to being charged to the furnace. On occasion, filter cake from the crystamet operation is added to the No. 2 Furnace batches to reduce dusting. Heat input to the furnace is natural gas. The glass that pours from the furnace is conveyed to the dissolving plant on a glass elevator. Product from the No. 2 Furnace operation eventually serves the micronized gel, hydrogel, and zeolite operations. It is also sold commercially.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed/Modified	Emission Control Equipment
Unit 02	Fusing Furnace #1, Natural Gas Fired Maximum Heat Input Capacity: 20 MBtu/hr	1961	Venturi Model #6 High Energy Scrubber  Total of (2)

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
	Fusing Furnace # 2, Natural Gas Fired Maximum Heat Input Capacity: 25 MBtu/hr	1961	Scrubbers

7.2.3 Applicability Provisions and Applicable Regulations

- a. The "affected Fusing Furnaces" for the purpose of these unit-specific conditions, are the emission units described in section 7.2.1 and 7.2.2.
- b. The affected unit 2 is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322. (See also Attachment 1) [35 IAC 212.322(a)]

- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply to photochemically reactive material [35 IAC 218.301].
- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm [35 IAC 214.301].

7.2.4 Non-Applicability of Regulations of Concern

The affected Fusing Furnaces are not subject to 40 CFR 60, Subpart CC, Standards of Performance for Glass Manufacturers. The affected Fusing Furnaces produce sodium silicate by the fusion of Silica or Sand with Soda Ash at very high temperatures. Sodium Silicate is available in Glass, anhydrous and hydrated grades. They are water soluble and are also available as aqueous solution. These are known as Water Glass while the more siliceous sodium silicates are Glasses. Subpart CC addresses Container Glass (glass made of soda-lime

recipe), Pressed or Blown Glass, Flat Glass (glass made of soda-lime recipe and produced into continuous flat sheets), and Wool Fiberglass (fibrous glass of random texture, including fiberglass insulation, and other products listed in SIC 3296). The subpart does not address the production of sodium silicate.

7.2.5 Control Requirements

None

7.2.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, the affected Fusing Furnaces are subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.6 that include this unit.

7.2.7 Operating Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.7, the Permittee shall maintain records of the following items for affected Fusing Furnaces to demonstrate compliance with 7.2.6, and 5.6.1, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall maintain records of the amount of sodium silicate produced on a daily basis.
- b. Hours of operation of the affected Fusing Furnaces.
- c. Annual aggregate PM, NO<sub>x</sub>, CO, VOM, and SO<sub>2</sub> emissions from affected Fusing Furnaces, based on emission rates and fuel usage with supporting calculations.

7.2.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section, within 3 days, of deviations of affected Fusing Furnaces with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

- a. Compliance with limitations of 7.2.3(b) & (d) is considered achieved by the proper operation and maintenance and the work-practices inherent in operation of the affected Fusing Furnaces.
- b. Compliance of the affected Fusing Furnaces with 5.6.1, 7.2.3(c) and 7.2.6 shall be based on the recordkeeping requirements of 7.2.9, and by the use of the emission rates and formulas listed below:

- i. Fusing Furnaces emissions (tons) = (hours of operation x appropriate emission factor)/2000

<u>Pollutant</u>	<u>Emission Rate</u> (lb/hr)	
	<u>Furnace 1</u>	<u>Furnace 2</u>
PM	4.66	4.66
NO <sub>x</sub>	3.11	3.11

Emission Factors from stack testing and as provided in the Title V application.

- ii. Fusing Furnaces emissions (tons) = (Sodium Silicate Produced x appropriate emission factor)/2000

<u>Pollutant</u>	<u>Emission Rate</u> (lb/Ton)	
	<u>Furnace 1</u>	<u>Furnace 2</u>
VOM	0.2	0.2
SO	0.2	0.2
CO	0.2	0.2

Emission factors from AP-42, Section 11.15 (Glass Manufacturing), Tables 11.15-1 and 11.15-2 (Raw Materials Handling (all types of glass))/with Venturi Scrubber, Volume I, Fifth Edition, October 1986.

7.3 Unit 03: Process Emission Source 2  
 Control: Centrifugal Cyclone Collector, Medium Efficiency  
 Scrubber, York Demister 014 Mesh

7.3.1 Description

Drymet 59 Production:

Milled product from storage bins is fed to an agglomerator, sprayed with agglomerating liquor, sent to a dryer, screened, and conveyed to a storage bin for bulk shipments. Equipment consists of: Storage Bin (fines), Surge Bin, Rotary Compactor, Indirect Fired Drier (12 MBtu/hr max firing rate), Screens, Mill, Deduster Rotary, and Product Storage.

Crystamet Production:

Milled product from storage bins is dissolved in plant rotoclone solution, evaporated to a desired density, filtered, chemically adjusted, cooled, crystallized, screened, and conveyed to storage bins for bulk shipments.

Zeolite Production

The three main raw materials used in this process are aluminum trihydrate, 50 % caustic, and sodium silicate solution. These materials are received by road tanker from external suppliers. The 50% caustic solution is stored in a tank farm, and the aluminum trihydrate is stored as flat storage in a warehouse. Zeolite is produced by batch mixing sodium aluminate and sodium silicate at the correct concentration, temperature, composition, and flowrate. The zeolite is discharged onto a filter belt. During this time, washing occurs throughout the belt. At the end of the final belt washing, the cake breaks off and is discharged into a dryer. Once the material enters the dryer and is dried to a specific moisture, the material is stored in a silo bins for unloading. Equipment consists of the following: ring dryer (30 MBtu/hr max firing rate) and rail/truck loadout.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 03	Drymet 59 Production	1967	Centrifugal Cyclone Collector, Medium Efficiency Scrubber, York Demister 014 Mesh

Emission Unit	Description	Date Constructed/ Modified	Emission Control Equipment
Unit 03 (Continued)	Crystamet Production	1961	Model 165 Scrubber w/2 Demister 014 Mesh Units
	Zeolite Production	1991/2001	Loadout Baghouse Filter, BW Dust Collectors for Silos, FlexKleen Jet Baghouse for Dryer

### 7.3.3 Applicability Provisions and Applicable Regulations

a. The "affected Process Emission Unit 3" for the purpose of these unit-specific conditions, are the emission units described in section 7.3.1 and 7.3.2.

b. The process emission source 2 (specifically Zeolite Production) is subject to 35 IAC 212.321, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified subsection (b) or (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321 (a)].

c. The process emission source 2 (specifically Drymet 59 Production and Crystamet Production) is subject to 35 IAC 212.322, which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322. (See also Attachment 1) [35 IAC 212.322(a)]

d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall only apply

to photochemically reactive material [35 IAC 218.301].

- e. For Drier of Zeolite Production in Affected Process Emission Unit 2:

No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit (indirect fired drier of affected Process Emission Unit 2) with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.3.4 Non-Applicability of Regulations of Concern

None

7.3.5 Control Requirements

None

7.3.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, the affected Process Emission Unit 2 is subject to the following:

- a. Emissions and operation of the Zeolite Production flash ring dryer shall not exceed the following limits:

	Emission Factor		
	<u>(Lb/mmscf)</u>	<u>(Lb/Hour)</u>	<u>(Tons/Year)</u>
NO <sub>x</sub>	100	3.0	13.14
CO	82	2.46	10.77

These limits are based on the maximum firing rate (30 mmBtu/hour) and maximum operating hours (8,760 hours/year). Compliance with annual limit shall be determined from a running total of 12 months of data. [T1]

The above limitations were established in Permit 00100018, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

- b. There are no other specific emission limitations for Unit 03, however, there are source wide emission limitations in Condition 5.6 that include other sources of this unit not included in (a).

7.3.7 Operating Requirements

At all times the Permittee shall operate equipment in accordance with good air pollution control practices.

7.3.8 Monitoring Requirements

Periodic inspection of dust collectors.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.7, the Permittee shall maintain records of the following items for the affected Process Emission Unit 3 to demonstrate compliance with 5.6.1, 7.3.3, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Operating hours of affected Process Emission Unit 3.
- b. Total natural gas usage for the indirect fired drier of Zeolite production (ft<sup>3</sup>/yr);
- c. Material usage in flash ring dryer.
- d. Records addressing use of good operating practices for the bag collectors:
  - i. Records for periodic inspection of the bag collectors with date, name of individual performing the inspection, and the nature of the inspection.
  - ii. Records of prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- e. Monthly and aggregate annual PM, CO, NO<sub>x</sub>, SO<sub>2</sub>, and VOM emissions from the affected Process Emission Unit 3 shall be maintained, based on engineering estimates, AP-42 Factors, and operating hours (as indicated in the Title V application), with supporting calculations.

7.3.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section, within 3 days, of deviations of the affected Process Emission Unit 2 with the permit requirements as

follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. To determine compliance with Conditions 5.6.1, 7.3.3(b) and (c), and 7.3.6 emissions from the affected process emission unit 2 shall be calculated based on the recordkeeping requirements of 7.3.9 along with engineering estimates and hours of operation as indicated in the Title V application.
- b. For the driers of the affected Process Emission Unit 2:

Emissions from driers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/10<sup>6</sup> ft<sup>3</sup>)</u>
CO	84
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5
NO <sub>x</sub>	100

Note: 1 therm = 100 ft<sup>3</sup>

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 MBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Indirect Fired Drier Emissions (Tons) = Natural Gas Consumed Multiplied by the Appropriate Emission Factor/2000.

7.4 Unit 04: Fuel Combustion Units  
Control: None

7.4.1 Description

Three natural gas-fired boilers, each with a maximum design heat input capacity of 100 mmBtu/hr or less, but greater than or equal to 10 mmBtu/hr and constructed, modified or reconstructed before June 9, 1989.

Warehouse heater (4.5 MBtu/hr capacity) used for heat in warehouse.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 04	Natural Gas Fired Boiler 2	1961	None
	Natural Gas Fired Boiler 3	1961	None
	Natural Gas Fired Boiler 5	1964	None
	Warehouse Heater	Unknown	None

7.4.3 Applicability Provisions and Applicable Regulations

- a. The "affected fuel combustion units" for the purpose of these unit-specific conditions, are the units described in conditions 7.4.1 and 7.4.2.
- b. The fuel combustion units are subject to the emission limits identified in Condition 5.3.2.
- c. The emissions of carbon monoxide (CO) into the atmosphere from any fuel combustion unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]

7.4.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9, 1989, with firing rates of 100 mmBtu/hr or less, but greater than 10 Btu/hr. All three boilers were constructed prior to June 9, 1989 and therefore, are not subject to this regulation.

- b. The fuel combustion units are not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MB (250 mmBtu/hr).
- c. There are no applicable requirements for particulate matter or sulfur dioxide for affected fuel combustion units firing natural gas.

7.4.5 Operational and Production Limits and Work Practices

Each affected boiler shall only be operated with natural gas.

7.4.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, the fuel combustion units are subject to the following:

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.4.7 Operating Requirements

None

7.4.8 Inspection Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.7, the Permittee shall maintain records of the following items for the fuel combustion units to demonstrate compliance with conditions 5.6.1, and 7.4.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for the fuel combustion units (ft<sup>3</sup>/yr);
- b. Annual aggregate NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the fuel combustion units, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.4.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section, within 10 days, of deviations of the fuel combustion units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Notification within 60 days of operation of an affected fuel combustion units that may not have been in compliance with the opacity limitations in Condition 5.3.2(b) only, with a copy of such record for each incident; and
- b. Emissions of NO<sub>x</sub>, CO, PM, VOM, and SO<sub>2</sub> from the affected fuel combustion units in excess of the limits specified in Condition 5.6.1 and 7.4.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.6.1 and 7.4.6 shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:
  - i. Emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5
CO	84

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (<100 mmBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Fuel Combustion Unit Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- b. Compliance of the fuel combustion units with Conditions 7.4.3(c) is demonstrated under inherent operating conditions of the fuel combustion units so that no compliance procedures are set in this project addressing these regulations.

7.5 Unit 05: Zeolite Boiler (NSPS Source)  
Control: None

7.5.1 Description

Natural gas-fired boiler, with a maximum design heat input capacity of 100 MBtu/hr or less, but greater than or equal to 10 MBtu/hr and constructed, modified or reconstructed after June 9, 1989.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 05	Natural Gas Fired Zeolite Boiler (40 MBtu/hr Heat Input Capacity)	1991	None

7.5.3 Applicable Provisions and Regulations

- a. An "affected boiler" for the purpose of these unit specific conditions, is a hot water generating unit that is fired with natural gas, with a maximum heat input capacity of 100 MBtu/hr or less, but greater than or equal to 10 MBtu/hr, and constructed, modified or reconstructed after June 9, 1989. As a consequence, the affected boiler is subject to the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc because the boiler was constructed after June 9, 1989 and the firing rates of the affected boiler is less than 100 MBtu/hr and greater than 10 MBtu/hr. The affected boiler is identified in Condition 7.5.1 and 7.5.2.
- b. The emission of carbon monoxide (CO) into the atmosphere from any affected boiler with actual heat input greater than 2.9 MW (10 MBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]
- c. The affected boiler is also subject to the opacity limits identified in Condition 5.3.2(b).

7.5.4 Non-Applicability of Regulations of Concern

- a. Pursuant to 35 IAC 218.303, each affected boiler, i.e., fuel combustion emission unit, is not subject to 35 IAC 28.301, Use of Organic Material.
- b. There are no applicable requirements for particulate matter or sulfur dioxide for affected boilers firing natural gas.

7.5.5 Operational and Production Limits and Work Practices

The affected boiler shall only be fired by natural gas.

7.5.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, the affected boiler is subject to the following:

<u>Item of Equipment</u>	<u>Operating Hours (Hr/Yr)</u>	<u>E M I S S I O N S</u>			
		<u>Nitrogen (Lb/Hr)</u>	<u>Oxides (T/Yr)</u>	<u>Carbon (Lb/Mo)</u>	<u>Monoxide (T/Yr)</u>
Boiler (40.176 mmBtu/Hr)	8,736	5.63	24.57	1.41	6.14

The above limitations were established in State Permit 73031163, pursuant to Title I of the Clean Air Act, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to these rules. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.5.7 Testing Requirements

None

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items to demonstrate compliance with Conditions 5.6.1 and 7.5.6 pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for affected boiler (ft<sup>3</sup>/day). [40 CFR 60.48c(g)]
- b. Annual aggregate NO<sub>x</sub>, PM, SO<sub>2</sub>, CO, and VOM emissions from the boiler, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section, within 10 days, of noncompliance with applicable control and operating requirements as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Notification of operation of the boilers that may not have been in compliance with the opacity limitations in Condition 5.3.2(b), with a copy of such record for each incident.
- b. Emissions of NO<sub>x</sub>, PM, SO<sub>2</sub>, CO, or VOM from the boilers in excess of the limits specified in Condition 5.6.1 and 7.5.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

- a. Compliance with the emission limits in Conditions 5.6.1 and 7.5.6 shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:
  - i. Emissions from the fuel combustion units burning natural gas shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor (lb/Mft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5
CO	84

These are the emission factors for uncontrolled natural gas combustion in commercial boilers (< 100 MBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement D, July 1998. VOM emission factor based on TOC factor corrected for 52% methane contribution.

Fuel Combustion Unit Emissions (ton) = natural gas consumed multiplied by the appropriate emission factor/2000.

- b. Compliance with Condition 7.5.3(b) is demonstrated under inherent operating conditions of an affected boiler, so that no compliance procedures are set in this permit addressing this requirement.

7.6 Unit 06: Fuel Oil #2 Storage Tank  
Control: Permanent Submerged Loading Pipe

7.6.1 Description

Fixed Roof Storage tank with a capacity of 7,600 gallons that is used to store #2 Fuel Oil.

7.6.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 06	7,600 Gallon #2 Fuel Oil Fixed Roof Storage Tank with Submerged Loading Pipe	6/86	Permanent Submerged Loading Pipe

7.6.3 Applicability Provisions and Applicable Regulations

- a. The Storage Tank is an "affected tank" for the purpose of these unit-specific conditions.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, and further processed consistent with 35 IAC 218.108 [35 IAC 218.122(b)].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304, and the following exception: If no odor nuisance exists the limitation of 35 IAC 218 Subpart G shall apply only to photochemically reactive material [35 IAC 218.301].

7.6.4 Non-Applicability of Regulations of Concern

- a. The affected tank is not subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank has a capacity less than 40 m<sup>3</sup>.
- b. The affected tank is not subject to the limitations of 35 IAC 218.120, Control Requirements for Storage Containers of VOL, pursuant to 35 IAC 218.119,

because the affected tank is used to store a petroleum liquid and the capacity is less than 151 m<sup>3</sup> (40,000 gal).

- c. The affected tank is not subject to the requirements of 35 IAC 218.121, Storage Containers of VPL, pursuant to 35 IAC 218.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m<sup>3</sup> (40,000 gal).
- d. The affected tank is not subject to the requirements of 35 IAC 218.586, Gasoline Dispensing Operations - Motor Vehicle Fueling Operations, pursuant to 35 IAC 218.586(b), which exempts any gasoline dispensing operation which dispenses an average monthly volume of less than 10,000 gallons of motor vehicle fuel per month. Pursuant to 35 IAC 218.586(a)(1), average monthly volume means the amount of motor vehicle fuel dispensed per month from a gasoline dispensing operation based upon a monthly average for the 2-year period of November, 1990 through October, 1992 or, if not available, the monthly average for the most recent twelve calendar months. Monthly averages are to include only those months when the operation was operating.

#### 7.6.5 Operational and Production Limits and Work Practices

The affected tank shall only be used for the storage of fuel oil.

#### 7.6.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, the affected tank is subject to the following:

This permit is issued based on negligible emissions of VOM from the affected tank. For this purpose, emissions shall not exceed 73.3 lb/month and 0.44 tons/year. [T1N]

The above limitations are being established in this Title V permit, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 [T1N].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1N]

7.6.7 Testing Requirements

None

7.6.8 Monitoring Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.7, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with Conditions 5.6.1, 7.6.3, and 7.6.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 IAC Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel [35 IAC 218.129(f)].
- b. Design information for the tank showing the presence of a permanent submerged loading pipe;
- c. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- d. The throughput of the affected tank, gal/mo and gal/yr; and
- e. The annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.6.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section, within 10 days, of deviations of an affected tank with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Any storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.6.3(b) (see also 35 IAC 218.122(b) and 218.583(a)(1)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall

include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;

- b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.6.3(b) (see also 35 IAC 218.122(b) and 218.583(a)(1)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance; and
- c. The storage of any VOL or VPL other than the material specified in Condition 7.6.5 within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

#### 7.6.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.6.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.6.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from each affected tank, the versions 3.1 or 4.0 of the TANKS program are acceptable.

7.7 Unit 07: Fugitive Emissions  
Control: None

7.7.1 Description

Fugitive emissions from the following:

Hydrogel Process - Sulfuric Acid

Micronized Gel Process - Sulfuric Acid

Roof-Furnace Building - Particulate Matter

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 07	Fugitive Emissions	---	None

7.7.3 Applicability Provisions and Applicable Regulations

- a. The "affected Unit 07" for the purpose of these unit-specific conditions, is the unit described in conditions 7.7.1 and 7.7.2.

7.7.4 Non-Applicability of Regulations of Concern

N/A

7.7.5 Operational and Production Limits and Work Practices

None

7.7.6 Emission Limitations

In addition to Condition 5.3.2 and the source wide emission limitations in Condition 5.6, Unit 07 is subject to the following:

None

7.7.7 Testing Requirements

None

7.7.8 Monitoring Requirements

None

7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.7, the Permittee shall maintain records of the following items

for the affected wastewater treatment system to demonstrate compliance with Conditions 5.6.1, and 7.7.6, pursuant to Section 39.5(7)(b) of the Act:

Hours of operation of the affected Unit 07

7.7.10 Reporting Requirements

The Permittee shall notify the Illinois EPA, Compliance Section, within 5 days, of noncompliance with the permit requirements pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.7.12 Compliance Procedures

To determine compliance with Conditions 5.6.1 and 7.7.6, fugitive emissions from the affected Unit 07 shall be calculated as follows:

a. Fugitive sulfuric acid emissions from the Hydrogel Process and Micronized Gel Process shall be based on engineering estimates and hours of operation as indicated in the Title V application.

b. Fugitive Particulate Matter in Furnace Building:

Background - There is a continuous heat relief valve that is located on the roof of the furnace building. The opening of the valve is 24 inches, or two feet, and it is 120 feet in length. It is estimated that within the furnace building, the amount of particulate in the air is approximately 2 mg/cubic meter. The velocity of the air leaving the heat valve was measured by plant personnel to be approximately 50 feet per minute. The following is a calculation of the fugitive dust that escapes through the heat relief valve:

$$\text{Emissions (ton per year)} = (0.0887 \text{ lb Particulate/hr}^* \times \text{hr/day} \times \text{day/year})/2000$$

\* Emission factor as provided in the Title V application

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after November 21, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;

- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois, 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

##### 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

##### 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

#### 9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

### 9.6 Recordkeeping

#### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

#### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

#### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

### 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

### 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
  - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

#### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

#### 9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Emissions of Particulate Matter from Existing Process Emission Units

- a. Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

Where:

P = Process weight rate; and  
 E = Allowable emission rate; and,

- 1. For process weight rates up to 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- 2. For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	- 18.4	- 40.0

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.	8.7	10.00	19.20
13.	11.1	15.00	25.20
18.	13.8	20.00	30.50
23.	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

Where:

P = Process weight rate in Mg/hr or T/hr, and

E = Allowable emission rate in kg/hr or lb/hr.

10.2 Attachment 2 - Emissions of Particulate Matter from New Process Emission Units

10.2.1 Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a. Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of this Section.
- b. Interpolated and extrapolated values of the data in subsection (c) of this Section shall be determined by using the equation:

$$E = A (P)^B$$

Where:

P = Process weight rate; and  
 E = Allowable emission rate; and,

- i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

- c. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.15
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
3.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

10.3 Attachment 3 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

#### 10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
  - Corrects typographical errors;
  - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - Requires more frequent monitoring or reporting by the Permittee;
  - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
2. Minor Permit Modification
  - Do not violate any applicable requirement;
  - Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT for the Illinois EPA to use to notify USEPA and affected States.

### 3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency  
Division Of Air Pollution Control -- Permit Section  
P.O. Box 19506  
Springfield, Illinois 62794-9506

<b>Application For Construction Permit (For CAAPP Sources Only)</b>	<b>For Illinois EPA use only</b>
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

<b>Source Information</b>		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

<b>Owner Information</b>		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

<b>Operator Information (if different from owner)</b>		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

<b>Applicant Information</b>	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

<b>Summary Of Application Contents</b>	
24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25. Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

<b>Signature Block</b>	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY:	_____
_____	TITLE OF SIGNATORY
AUTHORIZED SIGNATURE	_____ / _____ / _____
_____	DATE
TYPED OR PRINTED NAME OF SIGNATORY	

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

SIS:psj

Attachment 7 Compliance Assurance Monitoring (CAM) Plan

Table 7.1 PSEU Designation:	Unit 01 (D-701)
Significant Emission Unit Section:	7.1
Pollutant:	PM, PM <sub>10</sub>

Indicators: #1: Triboelectric Signal

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	A triboelectric monitor is installed at the baghouse exhaust. An alarm will flash on the control screen when the signal remains over a preset limit for 15 minutes to indicate a baghouse issue.
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as a triboelectric signal greater than 70% of scale for 15 minutes. Excursions trigger an inspection, corrective action, and recordkeeping requirement.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The data is collected at the emission point - the probe is inserted into the baghouse duct. The triboelectric signal is directly proportional to the amount of particulate in the exhaust.
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	N/A
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	The triboelectric probe is inspected periodically (monthly) for dust buildup. The monitor has an automatic internal calibration function for the electronics.
THE MONITORING FREQUENCY:	Continuous
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Data is continuously displayed on monitors in the control room at two second intervals. When an alarm occurs it is logged electronically.

THE DATA AVERAGING PERIOD  
FOR DETERMINING WHETHER  
AN EXCURSION OR  
EXCEEDANCE HAS OCCURRED:

None

Table 7.1 PSEU Designation:	Unit 01 (D-721)
Significant Emission Unit Section:	7.1
Pollutant:	PM, PM <sub>10</sub>

Indicators: #1: Triboelectric Signal

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	A triboelectric monitor is installed at the baghouse exhaust. An alarm will flash on the control screen when the signal remains over a preset limit for 15 minutes to indicate a baghouse issue.
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as a triboelectric signal greater than 70% of scale for 15 minutes. Excursions trigger an inspection, corrective action, and recordkeeping requirement.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The data is collected at the emission point - the probe is inserted into the baghouse duct. The triboelectric signal is directly proportional to the amount of particulate in the exhaust.
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	N/A
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	The triboelectric probe is inspected periodically (monthly) for dust buildup. The monitor has an automatic internal calibration function for the electronics.
THE MONITORING FREQUENCY:	Continuous
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Data is continuously displayed on monitors in the control room at two second intervals. When an alarm occurs it is logged electronically.
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	None

Table 7.1 PSEU Designation:	Unit 01 (D-801)
Significant Emission Unit Section:	7.1
Pollutant:	PM, PM <sub>10</sub>

Indicators: #1: Triboelectric Signal

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	A triboelectric monitor is installed at the baghouse exhaust. An alarm will flash on the control screen when the signal remains over a preset limit for 15 minutes to indicate a baghouse issue.
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as a triboelectric signal greater than 70% of scale for 15 minutes. Excursions trigger an inspection, corrective action, and recordkeeping requirement.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The data is collected at the emission point - the probe is inserted into the baghouse duct. The triboelectric signal is directly proportional to the amount of particulate in the exhaust.
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	N/A
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	The triboelectric probe is inspected periodically (monthly) for dust buildup. The monitor has an automatic internal calibration function for the electronics.
THE MONITORING FREQUENCY:	Continuous
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Data is continuously displayed on monitors in the control room at two second intervals. When an alarm occurs it is logged electronically.
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	None

Table 7.1 PSEU Designation:	Unit 01 (D-821)
Significant Emission Unit Section:	7.1
Pollutant:	PM, PM <sub>10</sub>

Indicators: #1: Triboelectric Signal

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	A triboelectric monitor is installed at the baghouse exhaust. An alarm will flash on the control screen when the signal remains over a preset limit for 15 minutes to indicate a baghouse issue.
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as a triboelectric signal greater than 70% of scale for 15 minutes. Excursions trigger an inspection, corrective action, and recordkeeping requirement.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The data is collected at the emission point - the probe is inserted into the baghouse duct. The triboelectric signal is directly proportional to the amount of particulate in the exhaust.
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	N/A
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	The triboelectric probe is inspected periodically (monthly) for dust buildup. The monitor has an automatic internal calibration function for the electronics.
THE MONITORING FREQUENCY:	Continuous
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Data is continuously displayed on monitors in the control room at two second intervals. When an alarm occurs it is logged electronically.
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	None



Table 7.1 PSEU Designation:	Unit 01 (D-853)
Significant Emission Unit Section:	7.1
Pollutant:	PM, PM <sub>10</sub>

Indicators: #1: Triboelectric Signal

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	A triboelectric monitor is installed at the baghouse exhaust. An alarm will flash on the control screen when the signal remains over a preset limit for 15 minutes to indicate a baghouse issue.
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	An excursion is defined as a triboelectric signal greater than 70% of scale for 15 minutes. Excursions trigger an inspection, corrective action, and recordkeeping requirement.
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	N/A

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	The data is collected at the emission point - the probe is inserted into the baghouse duct. The triboelectric signal is directly proportional to the amount of particulate in the exhaust.
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	N/A
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	The triboelectric probe is inspected periodically (monthly) for dust buildup. The monitor has an automatic internal calibration function for the electronics.
THE MONITORING FREQUENCY:	Continuous
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Data is continuously displayed on monitors in the control room at two second intervals. When an alarm occurs it is logged electronically.
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	None

