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1.0 SOURCE IDENTIFICATION

1.1 Source

J.M. Huber Corporation - Engineered Minerals Division  
3150 Gardener Expressway  
Quincy, Illinois 62301  
217/224-8737, EXT 3304

I.D. No.: 001815AAS  
Standard Industrial Classification: 1422, Non-Metallic Minerals,  
Except Fuels, Crushed and  
Broken Limestone

1.2 Owner/Parent Company

J.M. Huber Corporation - Engineered Minerals Division  
3150 Gardener Expressway  
Quincy, Illinois 62301

1.3 Operator

J.M. Huber Corporation - Engineered Minerals Division  
3150 Gardener Expressway  
Quincy, Illinois 62301

Dan Paben-Environmental, Health and Safety Coordinator  
217/224-8737, EXT 3294

1.4 General Source Description

The source is located in Adams County near Quincy. The source consists of an underground calcium carbonate mine and non-metallic minerals processing plant. The initial step in the grinding operations is primary crushing using jaw crusher, vibratory screen, hammermill and belt conveyors system connecting it to storage silos. The next step in the non-metallic mineral processing involves a variety of grinding mills, which continually reduce the particle size of the product. The grinding operations are conducted by a variety of equipment including cage mills, hammermills, roller mills, ball mills, and wet and dry media mills. All of the mills are equipped with air classifiers, cyclones, or sifters that separate particle sizes into a variety of products. The source is major for particulate matter emissions, and a minor source under the PSD program.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

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
ACMA	Alternative Compliance Market Account
ATUs	Allotment Trading Units
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
CO	Carbon Monoxide
ERMS	Emission Reduction Market System
°F	degrees Fahrenheit
ft <sup>3</sup>	cubic foot
gal	gallon
gm	gram
gr/scf	Grain per standard cubic foot
HAP	Hazardous Air Pollutant
Hp	horse power
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
°K	degrees Kelvin
Kg	kilogram
KW	Kilowatts
lb	Pound
MACT	Maximum Available Control Technology
mmcf	Million cubic feet
MG	Megagram
M	Meter
mmBtu	Million British thermal units
mo	month
MW	Megawatts
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
OM	Organic Material
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

psia	pounds per square inch absolute
RMP	Risk Management Plan
scf	standard cubic foot
SO <sub>2</sub>	Sulfur Dioxide
T	Ton
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
wt.	weight
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:

- 3 Portable heating units (Fuel oil 0.5 mmBtu/hr)
- 4 Portable heating units (Fuel oil 0.15 mmBtu/hr)
- 5 Space heaters (Natural Gas 0.25 to 0.082 mmBtu/hr)
- 1 Crusher #3 (Mill 32) Material storage pile

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:

- 1 Underground mining operations with barriers restricting airflow.
- 1 Mill #20, granite elite mixing operations located within the underground mine.
- 1 Mill #21, ATH mixing operations located within the underground mine.

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)].

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 215.182, 218.182, or 219.182.
- 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 215.301, 218.301, or 219.301, 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	Mill #	Equipment	Date of Construction/Modification
01	Primary crushing and transfer	Mill #31	5 Finished Product Tanks, Dust Collector, Hammer Mill, Jaw Crusher, Outside Rock Hopper, 7 Rubber Belt Conveyors, Stone Feeder Drag, 3 Vibratory Screens, Wet Spray Bar, and 5 Truck/Rail Loadouts	6/74 2/92 (addition of baghouse) 5/94 (replacement of baghouse) 6/97 (addition of 2 belt conveyors)
		Mill #32	Cone Crusher, 3 Finished Product Tanks, Jaw Crusher, Outside Rock Hopper, 5 Rubber Belt Conveyors, Stone Feeder Drag, Vibratory Screen, Wet Spray Bar, and Truck/Rail Loadout	5/74
02	Non-metallic mineral processing (Impact mill & Screen grade circuit)	Mill #1	4 Bucket Elevators, 4 Dust Collectors, Fines Air Sifter, 3 Finished Product Tanks, Fluid Bed Dryer, Furnace, Impact Mill, Inside Feed Tank, Kice Rotary Screen, Mill Vibratory Feeder, Outside Rock Hopper, 3 Vibratory Screens, and Truck/Rail Loadout	1973 1989 (addition of bin vent dust collector)
		Mill #11	Bagger, Bucket Elevator, 6 Dust Collectors, 3 Dust Free Loadouts, 2 Fines Air Sifters, 4 Finished Product Tanks, Furnace, Impact Mill, Inside Feed Tank, Outside Rock Hopper, 3 Rubber Belt Conveyors, and 2 Small Product Cyclones	1989/ 1990 (addition of bin vent dust collector)
		Mill #12	Bagger, 2 Dust Collectors, Fines Air Sifter, Finished Product Tank, Impact Mill, Inside Feed Tank, and Mill Vibratory Feeder	1990

Emission Unit	Description	Mill #	Equipment	Date of Construction/Modification
02 (Cont.)	Non-metallic mineral processing (Impact mill & Screen grade circuit)	Mill #18	2 Baggers, Bucket Elevator, 3 Dust Collectors, Fines Air Sifter, 2 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Outside Rock Hopper, Roller Mill, 2 Rubber Belt Conveyors, Screen, Sifter Fine Cyclone, and 2 Small Product Cyclones	1990 6/98 (addition of roller mill, cyclone, and conveyor)
		Mill #19	2 Baggers, 8 Bucket Elevators, Cage Mill, 12 Dust Collectors, 4 Dust Free Loadouts, Fines Air Sifter, 8 Finished Product Tanks, Furnace, Hammer Mill, 2 Inside Feed Tanks, 2 Main Mill Cyclones, Outside Rock Hopper, 2 Product Air Slides, Rotary Dryer, 3 Rubber Belt Conveyors, Super Sack Bagger, 3 Surge Bins, and 9 Vibratory Screens	1990/ 1991 (addition of bin vent dust collector) 10/96 (new dust collector, finished product tank, & bucket elevator) 6/97 (new dust collector, hammer mill, vibratory screen, belt conveyors, bucket elevator, & outside rock hopper) 7/97 (new dust collector, main mill cyclone, dust free loadout, & dust free articulating loadouts) 6/98 (new belt conveyor)

Emission Unit	Description	Mill #	Equipment	Date of Construction/Modification
03	Non-metallic mineral dry grinding (Ball, Roller & TRZK mills)	Mill #3	Bagger, Bucket Elevator, Chemical Pump, 4 Dust Collectors, Dust Free Loadout, 2 Fines Air Sifters, 4 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Miss Run Tank, Outside Rock Hopper, 3 Product Air Slides, Rock Vibratory Feeder, Roller Mill, and 3 Sifter Fine Cyclones	1972/ 1991 (addition of silo with dust collector) 11/99 (new bin vents & finished product tank)
		Mill #4	Bagger, Chemical Pump, 6 Dust Collectors, 5 Dust Free Loadouts, 2 Fines Air Sifters, 6 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, 2 Product Air Slides, Roller Mill, Rubber Belt Conveyor, and 2 Sifter Fine Cyclones	1972/ 1991 (addition of silo with dust collector)
		Mill #6	Bucket Elevator, Chemical Pump, 3 Dust Collectors, 3 Dust Free Loadouts, Fines Air Sifter, 3 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Miss Run Tank, Outside Rock Hopper, 2 Product Air Slides, Rock Vibratory Feeder, Roller Mill, and 2 Sifter Fine Cyclones	1976
		Mill #8	Bucket Elevator, Chemical Pump, 3 Dust Collectors, 2 Fines Air Sifters, 2 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Recycle Tank, Mill Vibratory Feeder, Outside Rock Hopper, 3 Product Air Slides, Rock Vibratory Feeder, Roller Mill, 3 Sifter Fine Cyclones, and Vibratory Feeder	1975

Emission Unit	Description	Mill #	Equipment	Date of Construction/Modification
03 (Cont.)	Non-metallic mineral dry grinding (Ball, Roller & TRZK mills)	Mill #9	Chemical Pump, Dust Collector, Fines Air Sifter, Furnace, Main Mill Cyclone, Mill Feed Tank, Roller Mill, 2 Rubber Belt Conveyors, and 3 Sifter Fine Cyclones	1992 2/95 (new silo with dust collector & 3 new dust collectors)
		Mill #10	Chemical Pump, Dust Collector, 2 Fines Air Sifters, Furnace, Main Mill Cyclone, Mill Feed Tank, Outside Rock Hopper, Roller Mill, 4 Rubber Belt Conveyors, 3 Sifter Fine Cyclones, and Small Product Cyclone	1985 9/2000 (new feed system)
		Mill #13	Chemical Pump, 3 Dust Collectors, 4 Dust Free Loadouts, 2 Fines Air Sifters, 4 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Outside Rock Hopper, Roller Mill, 2 Rubber Belt Conveyors, and 3 Sifter Fine Cyclones	1990 11/99 (addition of bagger & tank with dust collector)
		Mill #17	Bagger, Chemical Pump, 4 Dust Collectors, Fines Air Sifter, Finished Product Tank, 2 Mill Feed Tanks, Mill Vibratory Feeder, Rotary Screen, Small Product Cyclone, SWECO Screen, and TRZK Mill	1986
		Mill #28	Ball Mill, Bucket Elevator, Chemical Pump, Dust Collector, 2 Fines Air Sifters, Mill Feed Tank, Rotary Stream Splitter, and 5 Small Product Cyclones	1991 6/96 (new bucket elevator)
04	Non-metallic mineral wet grinding (Ultra fine circuit)	Mill #14	Bucket Elevator, Chemical Tank, Drais Mill, Dust Collector, 5 Finished Product Tanks, Inside Feed Tank, Make Down Tank, Mill Feed Tank, Transfer Tank, and Wet Vibratory Screen	1982

Emission Unit	Description	Mill #	Equipment	Date of Construction/Modification
04 (Cont.)	Non-metallic mineral wet grinding (Ultra fine circuit)	Mill #15	Bucket Elevator, Dust Collector, Matron, Roto Sieve, Spray Dry Furnace, and Spray Dryer	1979 3/95 (increased production)
05	Non-metallic mineral dry grinding & component blending (Ball & Roller mills)	Mill #7	Bagger, Ball Mill, Bucket Elevator, Chemical Feeder, Chemical Pump, 2 Dust Collectors, 2 Fines Air Sifters, Finished Product Tank, Product Air Slide, Rotary Stream Splitter, 4 Sifter Fine Cyclones, 2 Small Product Cyclones, and Super Sack Bagger	1973/ 1990 (addition of pin mixer)
		Mill #16	Bagger, Chemical Feeder, 2 Dust Collectors, Finished Product Tank, Furnace, 2 Mill Feed Tanks, Pin Mixer, Screw Feeder, Super Sack Bagger, and Vertical Impact Mill	1985/ 1986
	Non-metallic mineral dry grinding & component blending (Ball & Roller mills)	Mill #27	Ball Mill, Bucket Elevator, Chemical Feeder, Chemical Pump, Dust Collector, 3 Fines Air Sifters, Furnace, Mill Feed Tank, Product Air Slide, 4 Sifter Fine Cyclones, and 2 Small Product Cyclones	1979
	Mill #29	Chemical Feeder, Dust Collector, Furnace, Inside Feed Tank, Pin Mill, Small Product Cyclone, and Super Sack Bagger	1991/ 1992	
	Mill #37	Chemical Feeder, 2 Dust Collectors, Furnace, Mill Feed Tank, Rotary Pin Mixer, Small Product Cyclone, and Truck/Rail Loadout	1990	
Mill #47	Chemical Feeder, Dust Collector, Mill Feed Tank, Rotary Pin Mixer, and Small Product Cyclone	1979		

Emission Unit	Description	Mill #	Equipment	Date of Construction/Modification
06	Non-metallic mineral packaging & bulk load-out	Mill #26	2 Baggers, 10 Dust Collectors, 8 Dust Free Loadouts, 10 Finished Product Tanks, 16 Product Air Slides, and Super Sack Bagger	1992 6/96 (replacement of bucket elevator) 11/9 (3 finished product tanks with dust collectors)
		Mill #30	Automatic Bagger Cart, 10 Dust Collectors, 3 Dust Free Loadouts, 9 Finished Product Tanks, Manual Bagger Cart, 3 Product Air Slides, 25 Rubber Belt Conveyors, and Super Sack Cart	1982
		Mill #33	3 Dust Collectors, 2 Dust Free Loadouts, and Finished Product Tank	1994
07	Alumina Trihydride (ATH) processing, mixing, and packaging	Mill #2	2 Baggers, 4 Dust Collectors, 2 Dust Free Loadouts, 5 Finished Product Tanks, Kice Rotary Screen, Main Mill Cyclone, Mill Feed Tank, Miss Run Tank, Outside Rock Hopper, Product Air Slide, Roller Mill, and 3 Small Product Cyclones	1972 11/99 (addition of magnet separator & 2 dust collectors)
		Mill #5	Bagger, Bucket Elevator, 3 Dust Collectors, Dust Free Loadout, Fines Air Sifter, 3 Finished Product Tanks, Furnace, Kice Sifter, Main Mill Cyclone, Mill Feed Tank, Miss Run Tank, Outside Rock Hopper, 2 Product Air Slides, Roller Mill, 2 Rubber Belt Conveyors, Sifter Fine Cyclone, and 2 Small Product Cyclones	1972/ 1991 (addition of silo with dust collector)
		Mill #22	Blender	1985/ 1992 (addition of 3 silos with dust control)
08	Fugitive Emissions		Unpaved Haul Roads	---

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of PM emissions.
- 5.1.2 This permit is issued based on the source not being a major source of HAPs.

### 5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
  - 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 overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
  - b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- 5.2.3 Ozone Depleting Substances

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

#### 5.2.4 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.

- 5.2.5 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.

#### 5.2.6 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 that 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; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

#### 5.2.7 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.

#### 5.3 Non-Applicability of Regulations of Concern

Mill furnaces do not meet the definition of a fuel combustion emission source as defined in 35 IAC 211.2470 because the mill furnaces are direct-fired units. Therefore, the requirements for fuel combustion sources under 35 IAC 216.121 and 217-121 do not apply to the mill furnaces.

#### 5.4 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

#### 5.5 Source-Wide Emission Limitations

##### 5.5.1 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 5.5.1) 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)	16.55
Sulfur Dioxide (SO <sub>2</sub> )	17.79
Particulate Matter (PM)	212.4
Nitrogen Oxides (NO <sub>x</sub> )	41.45
HAP, not included in VOM or PM	None
Total	288.19

##### 5.5.2 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.

##### 5.5.3 Other Source-Wide Emission Limitations

a. The annual emissions from the source shall not exceed the limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

##### 5.5.3 Other Source-Wide Emission Limitations

a. The annual emissions from the source shall not exceed the limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).

- b. The annual particulate matter (PM) emissions from this shall not exceed 213 tons. This PM emission limit was determined to be the source's potential-to-emit at the peak of its operations.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. Other source-wide emission limitations are not set for this facility pursuant to either federal PSD (40 CFR 52.21), Illinois rules for Major Stationary Source Construction or Modifications (35 IAC 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.
- d. 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].

## 5.6 General Recordkeeping Requirements

### 5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, 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.

### 5.6.5 Records for Operating Scenarios

N/A

### 5.6.6 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.

5.7 General Reporting Requirements

5.7.1 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, 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.

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and compliance procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

## 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Emission Unit Group 01: Primary crushing and transfer

#### 7.1.1 Description

Huber operates a subsurface calcium carbonate mine on its property east of Highway 57. The mining operation follows a repetitive set of steps to extract calcium carbonate from the Dolbee Creek deposit. The first operation is drilling the active face to place explosive charges. Once the rock is exploded, front-end loaders and haul trucks remove the rock from the face and haul it out of the mine to the primary crusher. After the exploded rock is cleared, a scaling device is used to scrape the edges, sides, and top of the active face to remove any loose stone. The front end loader and haul trucks then move this rock to the crusher and the cycle is repeated.

The mine is ventilated by a system that includes six fans that are located along the bluff on the east side of Highway 57. This ventilation system does not generate visible emissions (except for a water vapor plume in the winter months) because of: (1) the substantial distance from the active mining face to the ventilation points, (2) wet conditions in the mine, and (3) the use of an air curtain system. Nearly all of the fugitive dust generated at the active face drops out in the mine before reaching the ventilation fans. For this reason, Huber is classifying the mining operation as an insignificant activity in this permit application.

The initial step in the grinding operations is primary crushing and transfer to a raw materials storage system. Particulate matter (potentially including PM-10) is the only emission from this process. The primary crushing is conducted at Mill 31, which includes a jaw crusher, vibratory screen, hammer mill, and belt conveyor system connecting it to three raw material storage silos. The hammer mill and vibratory screen are positioned within a partial or full enclosure, which reduces fugitive emissions. In addition to enclosures, a wet suppression spray system is located at the initial transfer to the jaw crusher, which further reduces fugitive particulate emissions. The vibratory screen and hammer mill are also controlled by a dust collector. Particulate emissions from the baghouse are considered to be entirely PM-10.

The raw materials storage system consists of three concrete silos, which either transfer crushed stone to two smaller silos, which then load haul trucks, or directly load haul trucks that transport crushed stone to other mills for further processing. Prior to transfer into the silos, the crushed stone passes through two vibratory

screens, which are housed within a total enclosure. One of the silos is also equipped with a belt conveyor system that transfers crushed stone to the granular plant (Mill 19) and to Roller Mill 2. The facility also operates a back-up crusher (Mill 32), which consists of a jaw crusher, vibratory screen, cone crusher, and storage silo system. The backup crusher is also used to process barite. This mill is equipped with a wet suppression spray system to control fugitive particulate emissions. Crushed stone from this mill is exclusively loaded into haul trucks for transfer to other mills for further processing.

7.1.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Primary crushing and transfer	Mill #31	5 Finished Product Tanks, Hammer Mill, Jaw Crusher, Outside Rock Hopper, 7 Rubber Belt Conveyors, Stone Feeder Drag, 3 Vibratory Screens, Wet Spray Bar, and 5 Truck/Rail Loadouts	Dust Collector, Wet spray bars
	Mill #32	Cone Crusher, 3 Finished Product Tanks, Jaw Crusher, Outside Rock Hopper, 5 Rubber Belt Conveyors, Stone Feeder Drag, Vibratory Screen, Wet Spray Bar, and Truck/Rail Loadout	Wet spray bars

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #31 and Mill #32" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.1.1 and 7.1.2.
- b. The "affected Mill #31 and Mill #32" are subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and OOO, because the plant commenced construction or modification after August 31, 1983. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

Pursuant to the NSPS (Subpart 000), both Mill #31 and Mill #32 are subject to the following provisions:

- i. Fugitive emissions of particulate matter from grinding mills, screens (except from truck dumping), bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)).
- ii. Fugitive emissions of particulate matter from the crushers (except from truck dumping) shall not exceed 15 percent opacity, (40 CFR 60.672(c) and (d)).

Pursuant to the NSPS (Subpart 000), Mill #31 is also subject to:

- i. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
- c. The affected Mill #31 and Mill #32 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].
- e. 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].
- f. The affected Mill #31 and Mill #32 are subject to the emission limits identified in Condition 5.2.2.

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #31 and Mill #32 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

7.1.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #31 and Mill #32 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].
- b. The Permittee shall follow good operating practices for the fabric filter dust collectors including periodic inspection, routine maintenance and prompt repair of defects.

7.1.6 Emission Limitations

In addition to Conditions 5.2.2, 7.1.3, and the source wide emission limitations in Condition 5.5, the affected Mill #31 and Mill #32 are subject to the following:

- a. Particulate matter emissions from Mill #31's baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).
- b. The total annual emissions from the Emission Unit (EU) Group 1 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	10	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.1.6(a) baghouse outlet concentration

limit (0.015 gr/dscf emission factor) were used to calculate this PM limit.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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].

#### 7.1.7 Testing Requirements

- a. The affected Mill #31 and Mill #32 are subject to the applicable testing requirements in 40 CFR 60.675. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- b. The affected Mill #31 and Mill #32 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
  - i. A test shall consist of 30 sets of 24 consecutive observations.
  - ii. Opacity measurements shall be performed by a certified observer.
- e. Upon reasonable request by Illinois EPA, the permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.1.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Mill #31 and Mill #32 to demonstrate compliance with Conditions 5.5.1, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).
- b. The affected Mill #31 and Mill #32 are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- d. Monthly and aggregate annual PM emissions from the affected Mill #31 and Mill #32 shall be maintained, based throughput and the applicable emission factors, with supporting calculations.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected Mill #31 and Mill #32 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. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.
- b. (Emissions of PM in excess of limits in Condition 7.1.6 within 30 days of such an occurrence.)

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.1.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.1.3, the Permittee shall conduct a qualitative visible emissions observation once each week to observe for the presence of abnormal visible emissions.

If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Conditions 5.5.1, 7.1.3 and 7.1.6 from the affected emission source shall be calculated based on the recordkeeping requirements in Condition 7.1.9 and the emission rates and formulas listed below:

Mill #	Description	PM Emission Factor lbs/T	% Control Efficiency
Mill #31	Rock Hopper	0.0000336	0
	Stone Drag Feeder	0.00294	0
	Jaw Crusher	0.0007	Spray Bar
	Belt Conveyors (2)	0.0001008	Spray Bar
	Belt Conveyor	0.00294	0
	Belt Conveyor	0.0001008	Enclosure
	Belt Conveyors (2)	0.0001008	Enclosure
	Vibratory Screens (2)	0.001764	Enclosure/ Spray Bar
	Finished Product Tanks (5)	0.00021	0
	Truck/Rail Loadout (5)	0.00021	0
Mill #32	Jaw Crusher	0.0007	Spray Bar
	Rock Hopper	0.0000336	0
	Stone Drag Feeder	0.00294	0
	Belt Conveyors (2)	0.0001008	Spray Bar
	Belt Conveyors (3)	0.00294	0

Mill #	Description	PM Emission Factor lbs/T	% Control Efficiency
Mill #32 (Cont.)	Vibratory Screen	0.001764	Spray Bar
	Cone Crusher	0.0007	Spray Bar
	Finished Product Tanks (3)	0.00021	0
	Truck Loadouts (3)	0.00021	0

The emission factors are from the application based on AP-42 factor.

Emissions (lbs/hr) = Emission Factor (lbs/T) x  
Process weight rate (T/hr) x (1-Control  
Efficiency/100)

and

Emissions (T) = Emission Rates (lbs/hr) x Hours of  
operation (hrs/yr) x 1/2000

Baghouse Emissions:

Emissions (T) = ((0.015 gr/dscf)/7000 x (total flow  
scfm x 60 x operating hours))/2000

- c. Compliance provisions addressing Conditions 7.1.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

## 7.2 Emission Unit Group 02: Non-metallic mineral processing (Impact mill & Screen grade circuit)

### 7.2.1 Description

The next step in the non-metallic mineral processing involves a variety of grinding mills, which continually reduce the particle size of the product. In many cases the product from one mill will become the feedstock for another as the material is ground to particle sizes as low as one micron. These grinding mills process crushed stone from Huber's Quincy mine and other non-metallic minerals imported from locations worldwide. These minerals may contain very trace amounts of naturally occurring metallic minerals, some of which may be Hazardous Air Pollutants (HAPs). However, laboratory work on stone from the Quincy Mine has not detected any metallic HAPs. Therefore, the emission inventory does not include any metallic HAPs from the non-metallic mineral processing plant.

The grinding operations are conducted by a variety of equipment including cage mills, hammer mills, and roller mills. The grinding mills are typically fed by outside rock hoppers, belt conveyors, or pneumatic conveyors. All pneumatic conveyors are controlled by dust collectors.

The coarser material is typically ground with impact mills, such as cage or hammer mills, which are also controlled by dust collectors. Fine materials are predominantly ground by roller mills and ball mills. Product from the roller mills is typically moved with a process air stream that flows to a main mill cyclone, then through a series of product diverters and additional air classifiers or sifters. Bleed air from this closed loop process always discharges through a duct collector. Product from the roller mills is typically removed by sealed bucket elevators, which feed various cyclones, sifters, and other air classifiers. The roller mill, bucket elevator, main mill cyclones, screens, and fine air sifters are all closed systems vented through dust collectors. All cyclones (small product and sifter fine) are within a sealed system and do not vent to a control device or to the atmosphere.

7.2.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral processing (Impact mill & Screen grade circuit)	Mill #1	4 Bucket Elevators, Fines Air Sifter, 3 Finished Product Tanks, Fluid Bed Dryer, Furnace, Impact Mill, Inside Feed Tank, Kice Rotary Screen, Mill Vibratory Feeder, Outside Rock Hopper, 3 Vibratory Screens, and Truck/Rail Loadout	4 Dust collectors /Baghouses
	Mill #11	Bagger, Bucket Elevator, 3 Dust Free Loadouts, 2 Fines Air Sifters, 4 Finished Product Tanks, Furnace, Impact Mill, Inside Feed Tank, Outside Rock Hopper, 3 Rubber Belt Conveyors, and 2 Small Product Cyclones	6 Dust collectors /Baghouses
	Mill #12	Bagger, Fines Air Sifter, Finished Product Tank, Impact Mill, Inside Feed Tank, and Mill Vibratory Feeder	2 Dust collectors /Baghouses
	Mill #18	2 Baggers, Bucket Elevator, 3 Dust Collectors, Fines Air Sifter, 2 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Outside Rock Hopper, Roller Mill, 2 Rubber Belt Conveyors, Screen, Sifter Fine Cyclone, and 2 Small Product Cyclones	3 Dust collectors /Baghouses

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral processing (Impact mill & Screen grade circuit)	Mill #19	2 Baggers, 8 Bucket Elevators, Cage Mill, 4 Dust Free Loadouts, Fines Air Sifter, 8 Finished Product Tanks, Furnace, Hammer Mill, 2 Inside Feed Tanks, 2 Main Mill Cyclones, Outside Rock Hopper, 2 Product Air Slides, Rotary Dryer, 3 Rubber Belt Conveyors, Super Sack Bagger, 3 Surge Bins, and 9 Vibratory Screens	12 Dust collectors /Baghouses

### 7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.2.1 and 7.2.2.
- b. The "affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19" are subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and OOO, because the plant commenced construction or modification after August 31, 1983. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to the NSPS:
  - i. Particulate matter emissions from baghouse stacks or any other process vents/stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
  - ii. Fugitive emissions of particulate matter from grinding mills, screens, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)). Those fugitive emissions that result from truck dumping into rock hoppers feeding the process are exempt.
  - iii. As an alternative to the fugitive emission limits under 7.2.3(b)(ii), for any emission sources inside production buildings, the

permittee can choose to limit fugitives via 40 CFR 60.672(e), which requires no visible emissions from the building enclosing the emission unit, except for forced draft vents that are subject to the limitations in condition 7.2.3(a)(i).

- c. The affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].
- e. 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].
- f. The affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are subject to the emission limits identified in Condition 5.2.2.

#### 7.2.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

#### 7.2.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 including associated air pollution control equipment

in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

- b. The Permittee shall follow good operating practices for fabric filter dust collectors including periodic inspection, routine maintenance and prompt repair of defects.

7.2.6 Emission Limitations

In addition to Conditions 5.2.2, 7.2.3 and the source wide emission limitations in Condition 5.5, the affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are subject to the following:

- a. Particulate matter emissions from baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).
- b. The total annual emissions from the EU Group 2 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	58	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.2.6(a) baghouse outlet concentration limit (0.015 gr/dscf emission factor) were used to calculate this PM limit.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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].

#### 7.2.7 Testing Requirements

- a. The affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are subject to the applicable testing requirements in 40 CFR 60.675. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- b. The affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
  - i. A test shall consist of 30 sets of 24 consecutive observations.
  - ii. Opacity measurements shall be performed by a certified observer.
- e. Upon reasonable request by Illinois EPA, the Permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.2.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).

- b. Natural gas usage (mmcf/yr) and/or Distillate oil usage (gal/yr).
- c. The affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- d. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for 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 emissions from the affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19 shall be maintained, based on throughput and the applicable emission factors, with supporting calculations.
- f. Aggregate annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the dryers associated with the affected Mill #1 shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

#### 7.2.10 Reporting Requirements

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

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.2.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.2.3, the Permittee shall conduct a qualitative visible emissions observation once each week to observe for the presence of abnormal visible emissions.

If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Condition 5.5.1, 7.2.3 and 7.2.6 from the affected emission source shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission rates and formulas listed below:

Mill #	Description	PM Emission Factor lbs/T	% Control Efficiency
1	Outside Rock Hopper	0.0000336	0
1	Bucket Elevator	0.00294	0
1	Kice Rotary Screen	0.0315	0
1	Truck/rail loadout	0.00021	0
11	Inside Feed Tank	0.0000336	0
11	Bucket Elevator	0.00294	0
11	Belt Conveyors (3)	0.00294	0
11	Outside Rock Hopper	0.0000336	0
12	Inside Feed Tank	0.0000336	0
18	Outside Rock Hopper	0.0000336	0
18	Rubber Belt Conveyors (2)	0.00294	0
19	Outside Rock Hopper	0.0000336	0
19	Bagger	0.00294	0
19	Rubber Belt Conveyors (2)	0.00294	0

The emission factors are from the application based on AP-42 factor.

$$\text{Emissions (lbs/hr)} = \text{Emission Factor (lbs/T)} \times \text{Process weight rate (T/hr)} \times (1 - \text{Control Efficiency}/100)$$

and

$$\text{Emissions (T)} = \text{Emission Rates (lbs/hr)} \times \text{Hours of operation (hrs/yr)} \times 1/2000$$

Baghouse Emissions:

$$\text{Emissions (T)} = ((0.015 \text{ gr/dscf})/7000 \times (\text{total flow scfm} \times 60 \times \text{operating hours}))/2000$$

- c. Compliance with the emission limits in Condition 5.5.1 and 7.2.3 from each affected mill furnace shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

- i. Emissions from the affected mill furnace/dryer burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor lbs/10 <sup>6</sup> scf
NO <sub>x</sub>	100
PM	7.6
VOM	5.5
SO <sub>2</sub>	0.6
CO	84

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, July, 1998.

$$\text{Emissions (ton/yr)} = (\text{natural gas usage, mmcf/yr}) \times (\text{the applicable emission factor, lb/mmcf}) \times (\text{ton}/2000 \text{ lb})$$

- ii. Emissions from the affected mill furnace/dryer burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factors (lb/10<sup>3</sup> gallon)</u>
PM	2
NO <sub>x</sub>	24
SO <sub>2</sub>	157%S
VOM	0.252
CO	5

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1, 1.3-3 and 1.3-7, AP-42, Volume I, Fifth Edition, Supplement E, September, 1998. "%S" indicates that the

weight % of sulfur in the oil should be multiplied by the value given.

Emissions (ton) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.2.12.
- d. Compliance provisions addressing Conditions 7.2.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

7.3 Emission Unit Group 03: Non-metallic mineral dry grinding (Ball, Roller & TRZK mills)

7.3.1 Description

Ball, Roller & TRZK mills, conducts similar process described in Section 7.2.1.

7.3.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral dry grinding (Ball, Roller & TRZK mills)	Mill #3	Bagger, Bucket Elevator, Chemical Pump, Dust Free Loadout, 2 Fines Air Sifters, 4 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Miss Run Tank, Outside Rock Hopper, 3 Product Air Slides, Rock Vibratory Feeder, Roller Mill, and 3 Sifter Fine Cyclones	4 Dust Collectors/ Baghouses
	Mill #4	Bagger, Chemical Pump, 5 Dust Free Loadouts, 2 Fines Air Sifters, 6 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, 2 Product Air Slides, Roller Mill, Rubber Belt Conveyor, and 2 Sifter Fine Cyclones	6 Dust Collectors/ Baghouses
Non-metallic mineral dry grinding (Ball, Roller & TRZK mills)	Mill #6	Bucket Elevator, Chemical Pump, 3 Dust Free Loadouts, Fines Air Sifter, 3 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Miss Run Tank, Outside Rock Hopper, 2 Product Air Slides, Rock Vibratory Feeder, Roller Mill, and 2 Sifter Fine Cyclones	3 Dust Collectors/ Baghouses

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral dry grinding (Ball, Roller & TRZK mills) (Cont.)	Mill #8	Bucket Elevator, Chemical Pump, 2 Fines Air Sifters, 2 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Recycle Tank, Mill Vibratory Feeder, Outside Rock Hopper, 3 Product Air Slides, Rock Vibratory Feeder, Roller Mill, 3 Sifter Fine Cyclones, and Vibratory Feeder	3 Dust Collectors/ Baghouses
	Mill #9	Chemical Pump, Fines Air Sifter, Furnace, Main Mill Cyclone, Mill Feed Tank, Roller Mill, 2 Rubber Belt Conveyors, and 3 Sifter Fine Cyclones	Dust Collector/ Baghouse
	Mill #10	Chemical Pump, 2 Fines Air Sifters, Furnace, Main Mill Cyclone, Mill Feed Tank, Outside Rock Hopper, Roller Mill, 4 Rubber Belt Conveyors, 3 Sifter Fine Cyclones, and Small Product Cyclone	Dust Collector/ Baghouse
	Mill #13	Chemical Pump, 4 Dust Free Loadouts, 2 Fines Air Sifters, 4 Finished Product Tanks, Furnace, Main Mill Cyclone, Mill Feed Tank, Mill Vibratory Feeder, Outside Rock Hopper, Roller Mill, 2 Rubber Belt Conveyors, and 3 Sifter Fine Cyclones	3 Dust Collectors/ Baghouses

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral dry grinding (Ball, Roller & TRZK mills) (Cont.)	Mill #17	Bagger, Chemical Pump, Fines Air Sifter, Finished Product Tank, 2 Mill Feed Tanks, Mill Vibratory Feeder, Rotary Screen, Small Product Cyclone, SWECO Screen, and TRZK Mill	4 Dust Collectors/ Baghouses
	Mill #28	Ball Mill, Bucket Elevator, Chemical Pump, 2 Fines Air Sifters, Mill Feed Tank, Rotary Stream Splitter, and 5 Small Product Cyclones	Dust Collector/ Baghouse

### 7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.3.1 and 7.3.2.
- b. The "affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28" are subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and OOO, because the plant commenced construction or modification after August 31, 1983. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 1). Pursuant to the NSPS:
  - i. Particulate matter emissions from baghouse stacks or any other process vents/stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity [40 CFR 60.672(a)].
  - ii. Fugitive emissions of particulate matter from grinding mills, screens, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)). Those fugitive emissions that result from truck dumping into rock hoppers feeding the process are exempt.

- iii. As an alternative to the fugitive emission limits under 7.3.3(b)(ii), for any emission sources inside production buildings, the permittee can choose to limit fugitives via 40 CFR 60.672(e), which requires no visible emissions from the building enclosing the emission unit, except for forced draft vents that are subject to the limitations in condition 7.3.3(a)(i).
  
- c. The affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].
  
- e. 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].
  
- f. The affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are subject to the emission limits identified in Condition 5.2.2.

#### 7.3.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

7.3.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].
- b. The Permittee shall follow good operating practices for fabric filter dust collectors including periodic inspection, routine maintenance and prompt repair of defects.

7.3.6 Emission Limitations

In addition to Conditions 5.2.2, 7.3.3 and the source wide emission limitations in Condition 5.5, the affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are subject to the following:

- a. Particulate matter emissions from baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).
- b. The total annual emissions from EU Group 3 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	48	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.3.6(a) baghouse outlet concentration limit (0.015 gr/dscf emission factor) were used to calculate this PM limit.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that

the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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].

#### 7.3.7 Testing Requirements

- a. The affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are subject to the applicable testing requirements in 40 CFR 60.675. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- b. The affected Mill #3, Mill #4, Mill #5, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
  - i. A test shall consist of 30 sets of 24 consecutive observations.
  - ii. Opacity measurements shall be performed by a certified observer.
- e. Upon reasonable request by Illinois EPA, the permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.3.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items

for the affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 to demonstrate compliance with Conditions 5.5.1, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).
- b. Natural gas usage (mmcf/yr) and/or Distillate oil usage (gal/yr).
- c. The affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- d. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for 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 emissions from the affected Mill #3, Mill #4, Mill #6, Mill #8, Mill #9, Mill #10, Mill #13, Mill #17 and Mill #28 shall be maintained, based throughput and the applicable emission factors, with supporting calculations.
- f. Aggregate annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the mill furnaces associated with the affected Mills shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

#### 7.3.10 Reporting Requirements

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

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30

days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.3.3, the Permittee shall conduct a qualitative visible emissions observation once each day to observe for the presence of abnormal visible emissions.

If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Condition 5.5.1, 7.3.3 and 7.3.6 from the affected emission sources shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission rates and formulas listed below:

Mill #	Description	PM Emission Factor lb/ton	% Control Efficiency
3	Outside Rock Hopper	0.0000336	0
3	Vibratory Feeder	0.00294	0
4	Mill Feed Tank	0.0000336	0
4	Rubber Belt Conveyor	0.00294	0
6	Outside Rock Hopper	0.0000336	0
6	Vibratory Feeder	0.00294	0
8	Outside Rock Hopper	0.0000336	0
8	Vibratory Feeder	0.00294	0
9	Mill Feed Tank	0.000016	0
9	Rubber Belt Conveyors (2)	0.00294	0
10	Mill Feed Tank	0.0000336	0
10	Outside Rock Hopper	0.0000336	0
10	Rubber Belt Conveyors (4)	0.00294	0
13	Outside Rock Hopper	0.0000336	0
13	Rubber Belt Conveyors (2)	0.00294	0

The emission factors are from the application based on AP-42 factor.

Emissions (lbs/hr) = Emission Factor (lbs/T) x Process weight rate (T/hr) x (1-Control Efficiency/100)

and

Emissions (T) = Emission Rates (lbs/hr) x Hours of operation (hrs/yr) x 1/2000

Baghouse Emissions:

Emissions (T) = ((0.015 gr/dscf)/7000 x (total flow scfm x 60 x operating hours))/2000

c. Compliance with the emission limits in Condition 5.5.1 and 7.3.3 from each affected mill furnace/dryer shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

i. Emissions from the affected mill furnace/dryer burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor lbs/10 <sup>6</sup> scf
NO <sub>x</sub>	100
PM	7.6
VOM	5.5
SO <sub>2</sub>	0.6
CO	84

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, July 1998.

Emissions (ton/yr) = (natural gas usage, mmcf/yr) x (the applicable emission factor, lb/mmcf) x (ton/2000 lb)

ii. Emissions from the affected mill furnace burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factors (lb/10<sup>3</sup> gallon)</u>
PM	2
NO <sub>x</sub>	24
SO <sub>2</sub>	157%S
VOM	0.252
CO	5

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1, 1.3-3 and 1.3-7, AP-42, Volume I, Fifth Edition, September 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Emissions (ton) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.3.12.
- d. Compliance provisions addressing Conditions 7.3.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

7.4 Emission Unit Group 04: Non-metallic mineral wet grinding (Ultra fine circuit)

7.4.1 Description

The ultra-fine grinding circuit is a wet process where the non-metallic minerals are slurried and fed into a stirred media (Drais) mill filled with small ceramic grinding balls. The Drais mill is fed by a tank that is loaded pneumatically from Mill 11, Mill 13, or from bulk tank trucks. The feed tank empties to a sealed bucket elevator, which transfers the material to the slurry tanks. The feed tank and bucket elevator are vented through a dust collector. Once the product is slurried, no additional venting is required and particulate emissions are negligible. After the product is wet ground, it is pumped to finished product slurry tanks, which feed the Mill 15 spray dryer. The spray dryer is also vented to a dust collector.

Mill 15 is equipped with a furnace to heat make-up air that is introduced into the process air system. The furnace is primarily fired with natural gas, but No. 2 fuel oil may be used as a back-up fuel if the availability or cost of natural gas becomes a problem. The facility is accepting a No. 2 fuel oil usage limit of 1,000,000 gallons per year to maintain allowable particulate emissions below the PSD major source trigger of 250 tons per year. The products of combustion (primarily NO<sub>x</sub>) are vented through the dust collectors that control the process air discharges.

7.4.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral wet grinding (Ultra fine circuit)	Mill #14	Bucket Elevator, Chemical Tank, Drais Mill, 5 Finished Product Tanks, Inside Feed Tank, Make Down Tank, Mill Feed Tank, Transfer Tank, and Wet Vibratory Screen	Dust collector/ Baghouse
	Mill #15	Bucket Elevator, Matron, Roto Sieve, Spray Dry Furnace, and Spray Dryer	Dust collector/ Baghouse

#### 7.4.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #14 and Mill #15" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.4.1 and 7.4.2.
- b. The affected Mill #14 and Mill #15 are subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and OOO, because the plant commenced construction or modification after August 31, 1983. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to the NSPS:
  - i. Particulate matter emissions from baghouse stacks or any other process vents/stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity [40 CFR 60.672(a)].
  - ii. Fugitive emissions of particulate matter from grinding mills, screens, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, [40 CFR 60.672(b) and (d)].
  - iii. As an alternative to the fugitive emission limits under 7.4.3(b)(ii), for any emission sources inside production buildings, the Permittee can choose to limit fugitives via 40 CFR 60.672(e), which requires no visible emissions from the building enclosing the emission unit, except for forced draft vents that are subject to the limitations in condition 7.4.3(a)(i).
- c. The affected Mill #14 and Mill #15 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303,

215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].

- e. 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].
- f. The affected Mill #14 and Mill #15 are subject to the emission limits identified in Condition 5.2.2.

#### 7.4.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #14 and Mill #15 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

#### 7.4.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #14 and Mill #15 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].
- b. The Permittee shall follow good operating practices for fabric filter dust collectors including periodic inspection, routine maintenance and prompt repair of defects.

#### 7.4.6 Emission Limitations

In addition to Conditions 5.2.2, 7.4.3, and the source wide emission limitations in Condition 5.5, the affected Mill #14 and Mill #15 are subject to the following:

- a. Particulate matter emissions from baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).
- b. The total annual emissions from EU Group 4 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	17	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.4.6(a) baghouse outlet concentration limit (0.015 gr/dscf emission factor) were used to calculate this PM limit.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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].

7.4.7 Testing Requirements

- a. The affected Mill #14 and Mill #15 are subject to the applicable testing requirements in 40 CFR 60.675. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- b. The affected Mill #14 and Mill #15 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
  - i. A test shall consist of 30 sets of 24 consecutive observations.
  - ii. Opacity measurements shall be performed by a certified observer.

- e. Upon reasonable request by Illinois EPA, the permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.4.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Mill #14 and Mill #15 to demonstrate compliance with Conditions 5.5.1, 7.4.3, and 7.4.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).
- b. Natural gas usage (mmcf/yr) and/or Distillate oil usage (gal/yr).
- c. The affected Mill #14 and Mill #15 are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- d. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for 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 emissions from the affected Mill #14 and Mill #15 shall be maintained, based on throughput and the applicable emission factors, with supporting calculations.
- f. Aggregate annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the dryers associated with the affected Mill #14 and Mill #15 shall be maintained, based on fuel usage and

the applicable emission factors, with supporting calculations.

#### 7.4.10 Reporting Requirements

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

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

None

#### 7.4.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.4.3, the Permittee shall conduct a qualitative visible emissions observation once each day to observe for the presence of abnormal visible emissions.

If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Condition 5.5.1, 7.4.3 and 7.4.6 from the affected emission sources shall be based on the recordkeeping requirements in Condition 7.4.9.

Mill #14 and Mill #15 do not have non-baghouse emissions.

Baghouse Emissions:

Emissions (T) = ((0.015 gr/dscf)/7000 x (total flow scfm x 60 x operating hours))/2000

c. Compliance with the emission limits in Condition 5.5.1 and 7.4.3 from each affected mill furnace shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

i. Emissions from the affected mill furnace/dryer burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor lbs/10 <sup>6</sup> scf
NO <sub>x</sub>	100
PM	7.6
VOM	5.5
SO <sub>2</sub>	0.6
CO	84

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, July 1998.

Emissions (ton/yr) = (natural gas usage, mmcf/yr) x (the applicable emission factor, lb/mmcf) x (ton/2000 lb)

ii. Emissions from the affected mill furnace/dryer burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factors (lb/10<sup>3</sup> gallon)</u>
PM	2
NO <sub>x</sub>	24
SO <sub>2</sub>	157%S
VOM	0.252
CO	5

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1, 1.3-3 and 1.3-7, AP-42, Volume I, Fifth Edition, September 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Emissions (ton) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.4.12.
- d. Compliance provisions addressing Conditions 7.4.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

7.5 Emission Unit Group 05: Non-metallic mineral dry grinding & component blending (Ball mills, Roller mills & Pin mixers)

7.5.1 Description

The final stages of the grinding/processing include component blending in rotary pin mixers. Only a portion of the product passes through this component blending circuit. Typically, a non-volatile organic material is added to prevent clumping or agglomeration of the product and improve its material handling characteristics. The only organic material added that has any volatility is propylene glycol. The extremely low vapor pressure of propylene glycol (less than 0.1 mm mercury at ambient temperature) results in very low emission rates. Based on conversations with Huber's propylene glycol supplier, the worst-case volatilization rate for typical conditions in the Pin Mixer system is estimated to be a 1% loss.

7.5.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral dry grinding & component blending (Ball mills, Roller mills & Pin mixers)	Mill #7	Bagger, Ball Mill, Bucket Elevator, Chemical Feeder, Chemical Pump, 2 Fines Air Sifters, Finished Product Tank, Product Air Slide, Rotary Stream Splitter, 4 Sifter Fine Cyclones, 2 Small Product Cyclones, and Super Sack Bagger	2 Dust Collectors/ Baghouses
	Mill #16	Bagger, Chemical Feeder, Finished Product Tank, Furnace, 2 Mill Feed Tanks, Pin Mixer, Screw Feeder, Super Sack Bagger, and Vertical Impact Mill	2 Dust Collectors/ Baghouses
	Mill #27	Ball Mill, Bucket Elevator, Chemical Feeder, Chemical Pump, 3 Fines Air Sifters, Furnace, Mill Feed Tank, Product Air Slide, 4 Sifter Fine Cyclones, and 2 Small Product Cyclones	Dust Collector/ Baghouse

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral dry grinding & component blending (Ball mills, Roller mills & Pin mixers) (Cont.)	Mill #29	Chemical Feeder, Furnace, Inside Feed Tank, Pin Mill, Small Product Cyclone, and Super Sack Bagger	Dust Collector/Baghouse
	Mill #37	Chemical Feeder, Furnace, Mill Feed Tank, Rotary Pin Mixer, Small Product Cyclone, and Truck/Rail Loadout	2 Dust Collectors/Baghouses
	Mill #47	Chemical Feeder, Mill Feed Tank, Rotary Pin Mixer, and Small Product Cyclone	Dust Collector/Baghouses

### 7.5.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.5.1 and 7.5.2.
- b. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and OOO, because the plant commenced construction or modification after August 31, 1983. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to the NSPS:
  - i. Particulate matter emissions from baghouse stacks or any other process vents/stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity [40 CFR 60.672(a)].
  - ii. Fugitive emissions of particulate matter from grinding mills, screens, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, [40 CFR 60.672(b) and (d)].
  - iii. As an alternative to the fugitive emission limits under 7.5.3(b)(ii), for any emission sources inside production buildings, the Permittee can choose to limit fugitives via 40 CFR 60.672(e), which requires no visible emissions from the building enclosing the emission unit, except for forced draft vents

that are subject to the limitations in Condition 7.5.3(a)(i).

- c. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].
- e. 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].
- f. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are subject to the emission limits identified in Condition 5.2.2.

#### 7.5.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

#### 7.5.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used

will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

- b. The Permittee shall follow good operating practices for the fabric filter dust collectors including periodic inspection, routine maintenance and prompt repair of defects.

#### 7.5.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are subject to the following:

- a. Particulate matter emissions from baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).
- b. The total annual emissions from EU Group 5 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	22	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.5.6(a) baghouse outlet concentration limit (0.015 gr/dscf emission factor) were used to calculate this PM limit.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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].

#### 7.5.7 Testing Requirements

- a. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are subject to the

applicable testing requirements in 40 CFR 60.675. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

- b. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
  - i. A test shall consist of 30 sets of 24 consecutive observations.
  - ii. Opacity measurements shall be performed by a certified observer.
- e. Upon reasonable request by Illinois EPA, the Permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.5.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 to demonstrate compliance with Conditions 5.5.1, 7.5.3, and 7.5.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).
- b. Natural gas usage (mmcf/yr) and/or Distillate oil usage (gal/yr).

- c. The affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- d. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for 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 emissions from the affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 shall be maintained, based on throughput and the applicable emission factors, with supporting calculations.
- f. Aggregate annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the dryers associated with the affected Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

#### 7.5.10 Reporting Requirements

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

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.5.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.5.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.5.3, the Permittee shall conduct a qualitative visible emissions observation once each day to observe for the presence of abnormal visible emissions.

If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Condition 5.5.1, 7.5.3 and 7.5.6 from the affected emission sources shall be based on the recordkeeping requirements in Condition 7.5.9.

Mill #7, Mill #16, Mill #19, Mill #27, Mill #29, Mill #37 and Mill #47 do not have non-baghouse emissions.

Baghouse Emissions:

$$\text{Emissions (T)} = ((0.015 \text{ gr/dscf})/7000 \times (\text{total flow scfm} \times 60 \times \text{operating hours}))/2000$$

- c. Compliance with the emission limits in Condition 5.5.1, 7.5.3 and 7.5.6 from each affected mill furnace shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:

- i. Emissions from the affected mill furnace/dryer burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor lbs/10 <sup>6</sup> scf
NO <sub>x</sub>	100
PM	7.6
VOM	5.5
SO <sub>2</sub>	0.6
CO	84

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, July 1998.

Emissions (ton/yr) = (natural gas usage, mmcf/yr) x (the applicable emission factor, lb/mmcf) x (ton/2000 lb)

- ii. Emissions from the affected mill furnace/dryer burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factors (lb/10<sup>3</sup> gallon)</u>
PM	2
NO <sub>x</sub>	24
SO <sub>2</sub>	157%S
VOM	0.252
CO	5

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1, 1.3-3 and 1.3-7, AP-42, Volume I, Fifth Edition, September 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Emissions (ton) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.5.12.
- d. VOC emissions from component blending:  
  
VOC emissions = Propylene glycol usage (gallons) x 8.989 lbs/gallon x 0.01 (1% loss)
- e. Compliance provisions addressing Conditions 7.5.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

7.6 Emission Unit Group 06: Non-metallic mineral packaging & bulk load-out

7.6.1 Description

Most of the grinding/processing mills include finished product storage tanks, which are typically loaded via a pneumatic transfer system. Venting from all of the finished product storage tanks is controlled by a dust collector. These tanks can then transfer materials to other mills or to one of three central packaging systems (Mill 26, 30 or 33). Mill 26 consists of a series of silos that are each equipped with a dust-free load-out for bulk tank trucks or railcars, and also can direct product to a series of bagging stations. Mill 30 consists of a series of silo that are connected to the primary bagging stations in the finished product warehouse. These include a manual bagger, automatic bagger, and a super sack (1,000 pound) bagging cart. All of the product bagging stations are vented through dust collectors. In addition to Mill 26 and 30, several other mills have finished product tanks that are equipped with dust-free load-outs for tank trucks or railcars or individual manual bagging stations. Mill 33 is a bulk load-out silo equipped dust-free load-outs for trucks and railcars.

7.6.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Non-metallic mineral packaging & bulk load-out	Mill #26	2 Baggers, 8 Dust Free Loadouts, 10 Finished Product Tanks, 16 Product Air Slides, and Super Sack Bagger	10 Dust Collectors/ Baghouses
	Mill #30	Automatic Bagger Cart, 3 Dust Free Loadouts, 9 Finished Product Tanks, Manual Bagger Cart, 3 Product Air Slides, 25 Rubber Belt Conveyors, and Super Sack Cart	10 Dust Collectors/ Baghouses
	Mill #33	2 Dust Free Loadouts and Finished Product Tank	3 Dust Collectors/ Baghouses

7.6.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #26, Mill #30 and Mill #33" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.6.1 and 7.6.2.

- b. The "affected Mill #1, Mill #11, Mill #12, Mill #18 and Mill #19" are subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and 000, because the plant commenced construction or modification after August 31, 1983. The Illinois EPA is administering NSPS in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to the NSPS:
- i. Particulate matter emissions from baghouse stacks or any other process vents/stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity [40 CFR 60.672(a)].
  - ii. Fugitive emissions of particulate matter from grinding mills, screens, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)). Those fugitive emissions that result from truck dumping into rock hoppers feeding the process are exempt.
  - iii. As an alternative to the fugitive emission limits under 7.2.3(b)(ii), for any emission sources inside production buildings, the Permittee can choose to limit fugitives via 40 CFR 60.672(e), which requires no visible emissions from the building enclosing the emission unit, except for forced draft vents that are subject to the limitations in Condition 7.2.3(a)(i).
- c. The affected Mill #26, Mill #30 and Mill #33 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If

no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].

- e. 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].
- f. The affected Mill #26, Mill #30 and Mill #33 are subject to the emission limits identified in Condition 5.2.2.

#### 7.6.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #26, Mill #30 and Mill #33 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

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

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #26, Mill #30 and Mill #33 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].
- b. The Permittee shall follow good operating practices for the fabric filter dust collectors including periodic inspection, routine maintenance and prompt repair of defects.

#### 7.6.6 Emission Limitations

In addition to Conditions 5.2.2, 7.6.3, and the source wide emission limitations in Condition 5.5, the affected Mill #26, Mill 30 and Mill #33 are subject to the following:

- a. Particulate matter emissions from baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).

- b. The total annual emissions from EU Group 6 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	24	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.6.6(a) baghouse outlet concentration limit (0.015 gr/dscf emission factor) were used to calculate this PM limit. The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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

- a. The affected Mill #26, Mill 30 and Mill #33 are subject to the applicable testing requirements in 40 CFR 60.675. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).
- b. The affected Mill #26, Mill 30 and Mill #33 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
- i. A test shall consist of 30 sets of 24 consecutive observations.
- ii. Opacity measurements shall be performed by a certified observer.

- e. Upon reasonable request by Illinois EPA, the permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.6.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Mill #26, Mill #30 and Mill #33 to demonstrate compliance with Conditions 5.5.1, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).
- b. The affected Mill #26, Mill #30 and Mill #33 are subject to the applicable recordkeeping requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- c. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- d. Monthly and aggregate annual PM emissions from the affected Mill #26, Mill #30 and Mill #33 shall be maintained, based throughput and the applicable emission factors, with supporting calculations.

#### 7.6.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected process emission source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports

shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.6.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.6.3, the Permittee shall conduct a qualitative visible emissions observation once each day to observe for the presence of abnormal visible emissions.

If abnormal visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Condition 5.5.1, 7.6.3 and 7.6.6 from the affected emission sources shall be based on the recordkeeping requirements in Condition 7.6.9.

Mill #26, Mill #30, and Mill #33 do not have non-baghouse emissions.

Baghouse Emissions:

Emissions (T) = ((0.015 gr/dscf)/7000 x (total flow scfm x 60 x operating hours))/2000

- c. Compliance provisions addressing Conditions 7.6.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

7.7 Emission Unit Group 07: Alumina Trihydride (ATH) Processing, Mixing, and Packaging

7.7.1 Description

Mill #2, Mill #5, and Mill #22 are utilized in the processing, mixing, and packaging of Alumina Trihydride (ATH). The ATH grinding operations are conducted by a roller mills, which are typically fed by outside rock hoppers or belt conveyors. The roller mills as well as cyclones, sifters, finished product tanks, screens, and baggers are all vented to baghouse dust collectors. ATH operations are not subject to the NSPS for Non-Metallic Mineral Processing Plant, 40 CFR 60 Subparts A and 000. Furthermore, since emissions from Mill #21 and Mill #22 are less than 1 lb/hr, those mills are exempt.

7.7.2 List of Emission Units and Pollution Control Equipment

Description	Mill #	Equipment	Emission Control Equipment
Alumina Trihydride (ATH) Processing, Mixing, and Packaging	Mill #2	2 Baggers, 2 Dust Free Loadouts, 5 Finished Product Tanks, Kice Rotary Screen, Main Mill Cyclone, Mill Feed Tank, Miss Run Tank, Outside Rock Hopper, Product Air Slide, Roller Mill, and 3 Small Product Cyclones	4 Dust collectors /Baghouses
	Mill #5	Bagger, Bucket Elevator, Dust Free Loadout, Fines Air Sifter, 3 Finished Product Tanks, Furnace, Kice Sifter, Main Mill Cyclone, Mill Feed Tank, Miss Run Tank, Outside Rock Hopper, 2 Product Air Slides, Roller Mill, 2 Rubber Belt Conveyors, Sifter Fine Cyclone, and 2 Small Product Cyclones	3 Dust collectors /Baghouses
	Mill #22	Blender	None

7.7.3 Applicability Provisions and Applicable Regulations

- a. An "affected Mill #2, Mill #5, and Mill #22" for the purpose of these unit-specific conditions is an

emission unit described in conditions 7.7.1 and 7.7.2.

- b. The affected Mill #2, Mill #5, and Mill #22 are 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, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 2) [35 IAC 212.321(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 an affected process emission source, except as provided in Sections 215.302, 215.303, 215.304 of this Part and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material [35 IAC 215.301].
- 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].
- e. The affected Mill #2, Mill #5, and Mill #22 are subject to the emission limits identified in Condition 5.2.2.

#### 7.7.4 Non-Applicability of Regulations of Concern

- a. The affected Mill #2, Mill #5, and Mill #22 are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).
- b. The affected Mill #2, Mill #5, and Mill #22 are not subject to NSPS Subpart OOO, since ATH is not classified as a non-metallic mineral.

#### 7.7.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected Mill #2, Mill #5, and Mill #22 including associated air pollution control equipment in a manner consistent with good air pollution control practice

for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

- b. The Permittee shall follow good operating practices for filters including periodic inspection, routine maintenance and prompt repair of defects.

#### 7.7.6 Emission Limitations

In addition to Conditions 5.2.2, 7.7.3 and the source wide emission limitations in Condition 5.5, the affected Mill #2, Mill #5, Mill #21, and Mill #22 are subject to the following:

- a. Particulate matter emissions from baghouse controlled vents or stacks shall not exceed 0.034 gm/dscm (0.015 gr/dscf).
- b. The total annual emissions from EU Group 7 shall not exceed the following limitations:

Pollutant	Emissions (T/Yr)	Underlying Rules
PM	14	40 CFR 52.21

This PM emission limit is established in conjunction with PM limits at all remaining EU Groups, to ensure that the facility remains classified as a minor source under the PSD rules (40 CFR 52.21). Maximum production rates, operating schedules, and the Condition 7.2.6(a) baghouse outlet concentration limit (0.015 gr/dscf emission factor) were used to calculate this PM limit.

The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the PM emissions from the affected emission units so that the facility will remain classified as a minor source under the PSD rules (40 CFR 52.21) [T1N].

- c. 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].

#### 7.7.7 Testing Requirements

- a. The affected Mill #2, Mill #5, and Mill #22 are subject to the applicable testing requirements established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).
- b. The Permittee shall visually inspect opacity on a regular basis.
- c. The Permittee shall observe visible emissions on a regular basis.
- d. Upon discovery of abnormal visible emissions that cannot be corrected within 24 hours, opacity measurements shall be determined according to the USEPA Method 9, 40 CFR 60 Appendix A.
  - i. A test shall consist of 30 sets of 24 consecutive observations.
  - ii. Opacity measurements shall be performed by a certified observer.
- e. Upon reasonable request by Illinois EPA, the permittee shall conduct PM emission tests on the baghouse stacks or other process vents/stacks according to USEPA Reference Method 5 of 40 CFR 60, Appendix A.

#### 7.7.8 Monitoring Requirements

The Permittee shall monitor the differential pressure across each baghouse controlling an affected process emission source.

#### 7.7.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected Mill #2, Mill #5, Mill #21, and Mill #22 to demonstrate compliance with Conditions 5.5.1, 7.7.3, and 7.7.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Quantity of material processed (T/mo, T/yr), and/or Hours of operation of equipment (hr/mo, hr/yr).
- b. Natural gas usage (mmcf/yr) and/or Distillate oil usage (gal/yr).
- c. The affected Mill #2, Mill #5, Mill #21, and Mill #22 are subject to the applicable recordkeeping requirements established in State Construction and

Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 3).

- d. Records addressing use of good operating practices for the filters:
  - i. Records for periodic inspection of the filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for 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 emissions from the affected Mill #2, Mill #5, Mill #21, and Mill #22 shall be maintained, based on throughput and the applicable emission factors, with supporting calculations.
- f. Aggregate annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the dryers associated with the affected Mill #1 shall be maintained, based on fuel usage and the applicable emission factors, with supporting calculations.

#### 7.7.10 Reporting Requirements

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

- a. If there is a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report within 30 days after the deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the deviation and efforts to reduce emissions and future occurrences.

#### 7.7.11 Operational Flexibility/Anticipated Operating Scenarios

None

#### 7.7.12 Compliance Procedures

- a. Compliance with the opacity limitations of Condition 5.2.2 & 7.7.3, the Permittee shall conduct a qualitative visible emissions observation once each

week to observe for the presence of visible emissions.

If visible emissions are observed, the Permittee shall initiate corrective actions to eliminate the abnormal visible emissions. If the Permittee cannot eliminate the abnormal visible emissions within 24 hours, the Permittee shall conduct a Method 9 test within three days after the qualitative observation showing abnormal emissions.

- b. Compliance with the emission limits in Condition 5.5.1, 7.7.3 and 7.7.6 from the affected emission source shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission rates and formulas listed below:

Mill #	Description	PM Emission Factor lbs/T	% Control Efficiency
5	Outside Rock Hopper	0.0000336	0
5	Rubber Belt Conveyor (2)	0.00294	0

The emission factors are from the application based on AP-42 factor.

Emissions (lbs/hr) = Emission Factor (lbs/T) x Process weight rate (T/hr) x (1-Control Efficiency/100)

and

Emissions (T) = Emission Rates (lbs/hr) x Hours of operation (hrs/yr) x 1/2000

Baghouse Emissions:

Emissions (T) = ((0.015 gr/dscf)/7000 x (total flow scfm x 60 x operating hours))/2000

- c. Compliance with the emission limits in Condition 5.5.1 and 7.7.3 from each affected mill furnace shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission factors and formulas listed below:
  - i. Emissions from the affected mill furnace/dryer burning natural gas shall be calculated based on the following emission factors:

Pollutant	Emission Factor lbs/10 <sup>6</sup> scf
NO <sub>x</sub>	100
PM	7.6
VOM	5.5
SO <sub>2</sub>	0.6
CO	84

The emission factors for natural gas fired units are from Tables 1.4-1 and 1.4-2, AP-42 Fifth Edition, Volume 1, Supplement D, July, 1998.

Emissions (ton/yr) = (natural gas usage, mmcf/yr) x (the applicable emission factor, lb/mmcf) x (ton/2000 lb)

- ii. Emissions from the affected mill furnace/dryer burning distillate fuel oil shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factors (lb/10<sup>3</sup> gallon)</u>
PM	2
NO <sub>x</sub>	24
SO <sub>2</sub>	157%S
VOM	0.252
CO	5

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1, 1.3-3 and 1.3-7, AP-42, Volume I, Fifth Edition, Supplement E, September, 1998. "%S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Emissions (ton) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor/2000.

- iii. Total emissions for each pollutant are to be determined by combining the results of Conditions 7.2.12.
- d. Compliance provisions addressing Conditions 7.7.3(d) and (e) are not set by this permit as compliance is assumed to be achieved by the type of material usage in normal operation of the affected emission unit.

7.8 Unit 8 - Fugitive Emissions

7.8.1 Description

Fugitive emissions are defined as those emissions, which would not reasonably pass through a stack, vent or other functionally equivalent opening.

7.8.2 List of Emission Units

Fugitive dust from unpaved haul roads caused by bulk and packaging trucks.

7.8.3 Applicability Provisions and Applicable Regulations

- a. The "affected fugitive emission sources" for the purpose of these unit-specific conditions, are emission sources described in Conditions 7.8.1 and 7.8.2.

7.8.4 Non-Applicability of Regulations of Concern

- a. The affected fugitive emission sources of PM are not subject to the requirements of 35 IAC 212.321, Emissions of Particulate Matter from Process Emission Units, because due to the unique nature of this process, such rules cannot reasonably be applied.

7.8.5 Operational and Production Limits and Work Practices

None

7.8.6 Emission Limitations

In addition to Condition 5.2.2 and the source-wide emission limitations in Condition 5.5, the fugitive emission sources are subject to the following:

None

7.8.7 Testing Requirements

None

7.8.8 Inspection Requirements

None

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected fugitive emission sources to demonstrate

compliance with Conditions 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

- a. Total vehicle miles traveled (VMT) by bulk and packaging trucks on facility-owned unpaved haul roads.

7.8.10 Reporting Requirements

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

7.8.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.8.12 Compliance Procedures

Compliance with the limits in Conditions 5.5.1 shall be based on the recordkeeping requirements in Condition 7.8.9 and the emission factors listed below:

	Uncontrolled PM emission factor lb/VMT
Bulk and Package trucks	2.10

PM Emissions from Vehicular Mile Traveled (VMT) on unpaved haul roads:

$$\text{PM Emissions T/yr} = \text{Emission factor (lb/VMT)} \times \text{VMT} \times (1 - \text{control \%}/100) \times 1/2000$$

The above emission factors are from the application. The application indicates the haul roads are sprayed with water when needed.

## 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 October 1, 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].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

### 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  
5415 North University  
Peoria, Illinois 61614

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

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

## 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 - Applicable New Source Performance Standards (NSPS)

40 CFR 60 Subpart 000--Standards of Performance  
for Nonmetallic Mineral Processing Plants

Emissions of Particulate Matter from New  
Process Emission Units

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

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

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

Where:

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

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

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/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 ton/hr):

	Metric	English
P	Mg/hr	Ton/hr
E	kg/hr	Lb/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 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	ton/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77

Metric		English	
P	E	P	E
Mg/hr	kg/hr	ton/hr	lb/hr
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.2	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

Where:

P = Process weight rate in Mg/hr or T/hr; and  
E = Allowable emission rate in Kg/hr or lbs/hr

10.3 Attachment 3 - State Construction and Operating Permits

217/782-2113

OPERATING PERMIT/NSPS SOURCES

PERMITTEE

J.M. Huber Corporation  
Attn: Tom Newman  
3150 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 92120070                      I.D. No.: 001815AAS  
Applicant's Designation: MILL 9            Date Received: November 28, 1994  
Subject: Mill 9  
Date Issued: February 22, 1995            Expiration Date: February 22, 1998  
Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a roller mill with a baghouse (8,000 cfm), a cyclone separator, a classifier, a new limestone storage silo (800T) with a new baghouse (4,000 cfm), two existing silo (150T each) each with a new baghouse (4,000 cfm), an existing silo (150T) with a new baghouse (2,500 cfm) and two rail bulk loadouts each with a baghouse (1,500 cfm), as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This lime mill is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and OOO. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
2. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
3. Fugitive emissions of particulate matter from grinding mills, screens (except from truck dumping), bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)).
4. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

5. The Permittee shall maintain records of the occurrence and duration of any malfunction of equipment which results in emissions in excess of applicable standards, pursuant to 40 CFR 60.7(b).
6. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Gas Flow Rate (cfm)</u>	<u>Controlled Particulate Matter Emissions (Lb/Hr)</u>	<u>Emissions (Ton/Yr)</u>
Roller Mill and Air Classifier w/Baghouse	8,000	1.50	6.60
800T Silo w/Baghouse	4,000	0.75	3.30
Two 150T Silos each w/Baghouse	4,000	0.75 (each)	3.30 (each)
150T Silo w/Baghouse	2,500	0.47	2.06
Two Rail Loadouts each w/Baghouse	1,500	0.28 (each)	1.23 (each)
	Total		<u>21.02</u>

These limits are based on the allowable emission rate (0.022 grains/dscf) and the maximum gas flow rates indicated in the application. The annual limit is the product of the hourly limit and the maximum hours of operation (8760 hr/yr) indicated in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

7. No person shall cause or allow any visible emissions of the fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.

If you have any questions on this, please call Manish Patel at 217/782-2113.

Donald E. Sutton, P.E.  
 Manager, Permit Section  
 Division of Air Pollution Control

DES:MNP:lat/sp/174Y,4-5

cc: IEPA, FOS Region 2  
 IEPA, FOS - CMU  
 USEPA

217/782-2113

OPERATING PERMIT - REVISED

PERMITTEE

J.M. Huber Corp. - Engineered Minerals Div.  
Attn: Environmental Coordinator  
3150 Gardner Expressway  
Quincy, IL 62305-4005

Application No.: 72090220      I.D. No.: 001815AAS  
Applicant's Designation:      Date Received: April 10, 1996  
Subject: Mills 6, 7, 7R, 7 Granular and 28 (designated as Mill 26)  
Date Issued: June 10, 1996      Expiration Date: January 31, 1997  
Location: 3150 Gardner Expressway, Quincy, Milrose Township,  
Adams County

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of (A) existing sources: a Raymond mill, fluid bed dryer, storage tanks, pebble mill, bagpacker, Raymond mill plant, blow packer, pulverisor, pebble tube mill, pin mill bulk loading with spouts and baghouses, (B) mill #28: one truck hopper, bucket elevator, one IMP mill, one ball mill, one treating system, two air classifiers, three cartridge dust collectors, one bin vent filter, three feed tanks, three storage tanks with bin vent baghouses, and (C) 3 baggers and 35 ton finished product storage tank all controlled by a dust collector (26-MDC-010) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. The new mill #28 is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and OOO. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7% opacity (40 CFR 60.672(a)).
- c. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Gas Flow Rate</u> <u>(cfm)</u>	<u>Particulate Matter</u> <u>(lb/hr) (ton/yr)</u>	
IMP Mill and Air Classifier w/Cartridge Dust Collector	8,000	1.50	6.60
Feed Tank w/Bin Vent Filter	1,000	0.19	0.80

<u>Item of Equipment</u>	<u>Gas Flow Rate (cfm)</u>	<u>Particulate Matter (lb/hr)</u>	<u>(ton/yr)</u>
Ball Mill, Air Classifier, & Feed Tank w/Cartridge Dust Collector	8,000	1.50	6.60
Treating System and Feed Tank w/Cartridge Dust Collector	3,000	0.57	2.50
Storage Tank #6 w/bin vent baghouse	2,100	0.40	1.75
Storage Tank #7 w/bin vent baghouse	2,100	0.40	1.75
Storage Tank #8 w/bin vent baghouse	2,100	0.40	1.75
Finished Product Storage Tank (35 ton) w/Main Dust Collector (26-MDC-010)	5,400	1.02	4.46

These limits are based on the allowable emission rate (0.022 grains/dscf) and the maximum gas flow rates indicated in the application. The annual limit is the product of the hourly limit and the maximum hours of operation (8736 hr/yr) indicated in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
3. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

It should be noted that this permit has been revised to show replacement of bucket elevator as described in construction permit #96040042, without any increase in emissions of particulate matter into the atmosphere.

If you have any questions on this, please call Manish N. Patel at 217/782-2113.

Donald E. Sutton, P.E.  
 Manager, Permit Section  
 Division of Air Pollution Control

DES:MNP:drk

cc: Region 2

217/782-2113

"REVISED"  
OPERATING PERMIT - NSPS

PERMITTEE

Sem Minerals, L.P.  
Attn: Paul Shelton  
3806 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 72101037                      I.D. No.: 001815AAS  
Applicant's Designation: MILLS2345      Date Received: April 8, 1994  
Subject: Raymond Mill 2, 3, 4 & 5  
Date Issued: June 21, 1994                  Expiration Date: April 8, 1999  
Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of four Raymond Mills with baggers controlled with baghouses, classifiers, bulk loadout controlled with baghouses and IMP mill with dust collector, a limestone storage tank with dust collector, and a ground Limestone storage silo with a dust collector (Q60-Q200) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours (Hour/Year)</u>	<u>Particulate Matter Emissions Lb/Hour</u>	<u>Ton/Yr</u>
IMP Mill with dust collector	4,160	6.0	12.5

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. This permit is issued based upon a minimal hourly emission rate and negligible annual emissions (less than 0.1 ton/year) of particulate matter from limestone storage tank.
3. The limestone storage silo is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and 000. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.

4. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
5. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours (Hour/Year)</u>	<u>Particulate Matter Emissions Lb/Hour</u>	<u>Ton/Yr</u>
Silo with dust collector	2,500	0.47	2.10

These limits are based on the allowable emission rate (0.022 grains/dscf) and the maximum gas flow rate indicated in the application. The annual limit is the product of the hourly limit and the maximum hours of operation (8736 hr/yr) indicated in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

6. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.

If you have any questions on this, please call Mangu Patel at 217/782-2113.

Donald E. Sutton, P.E.  
 Manager, Permit Section  
 Division of Air Pollution Control

DES:MJP:TJM:psj

cc: Region 2

217/782-2113

"REVISED"  
OPERATING PERMIT

PERMITTEE

Sem Minerals, L.P.  
Attn: Paul Shelton  
3806 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 75080054                      I.D. No.: 001815AAS  
Applicant's Designation: CRUSHER #1   Date Received: March 9, 1994  
Subject: Crushing Plant #1  
Date Issued: May 23, 1994                      Expiration Date: May 23, 1999  
Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a hopper with water misters, 30 x 42 Pioneer primary jaw crusher, two enclosed 6' x 14' screens and enclosed Williams #20 slugger secondary hammermill crusher controlled by baghouse, three storage silos, and conveyors as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon replacement of an existing baghouse with a new baghouse without any increase in emissions above those previously allowed.
2. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.

If you have any questions on this, please call Bill Marr at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:WDM:TJM:psj

cc: Region 2

217/782-2113

"REVISED"  
OPERATING PERMIT

PERMITTEE

SEM Minerals, L.P.  
Attn: Paul Shelton  
3806 Gardner Expressway  
Quincy, Illinois 62305

Application No.: 79070043                      I.D. No.: 001815AAS  
Applicant's Designation: MILL-15              Date Received: December 21, 1994  
Subject: Ultra-Fine Limestone Grinding - Mill 15  
Date Issued: March 22, 1995                  Expiration Date: June 23, 1998  
Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a Raymond roller mill with Micro-Pulsaire dust collector (#1215-10-20), a Proctor and Schwartz spray dryer with Micro-Pulsaire dust collector (#384-KTRH-10-20), a St. Regis force flow packer with Micro-Pulsaire dust collector (#815-8-20) and a micro pulverizer with Micro-Pulsaire dust collector (#221TRH-8-35C) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto.

It should be noted that this permit has been revised to include production of magnesium hydroxide and alumina trihydrate without any increase in particulate matter emissions above these previously allowed.

If you have any questions on this, please call Mangu Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MJP:jar

cc: Region 2

217/782-2113

OPERATING PERMIT - NSPS SOURCE - REVISED

PERMITTEE

SEM Minerals, L.P.  
Attn: Paul Shelton  
3806 Gardner Expressway  
Quincy, Illinois 62301

<u>Application No.:</u> 90020001	<u>I.D. No.:</u> 001815AAS
<u>Applicant's Designation:</u> MILL 19	<u>Date Received:</u> April 28, 1997
<u>Subject:</u> Granular Mill (19)	
<u>Date Issued:</u> July 7, 1997	<u>Expiration Date:</u> May 7, 2002
<u>Location:</u> 3150 Gardner Expressway, Quincy, Melrose Township, Adams County	

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of Mill 19 which involves equipment listed in Attachment A as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. The Mill 19 and associated operation listed in Attachment A are subject to New Source Performance Standards (NSPS) 40 CFR 60, Subparts A and 000. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
- c. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
2. Emissions and operation of equipment shall not exceed the limits specified in Attachment A of this permit.
3. The Permittee shall not cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- 4a. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow

the Illinois EPA to review compliance with the limits in Condition 2.

Material processed from each operation (tons/hr and tons/day).

- b. These records shall be retained for three years and shall be available for inspection and copying by the Illinois EPA.

It should be noted that this permit has been revised to incorporate operation of equipment permitted in construction permit 96010084 and 97040114. It should also be noted that all the equipment and operation permitted in this permit are subject to NSPS, 40 CFR 60, Subparts A and 000. This permit has been revised to indicate the applicability of the NSPS and also to incorporate limitations and changes requested by the applicant.

If you have any questions on this, please call Manish N. Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MNP:jar

Region 3

Permit #: 90020001  
 Mill #19

Attachment A

<u>Item of Equipment</u>	<u>Process Air Flow (scfm)</u>	<u>Process Wt. Rate (Ton/Hr)</u>	<u>Particulate Matter Emissions</u>	
			<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Furnace (19MMF001), Feed Tank (19IFT001), Rotary Dryer (19PRD001), Bucket Elevator (19BEL001), Controlled by Main Mill Cyclone (19MMC001) and Dust Collector (19MDC001)	16,338	30	1.12	4.91
Finished Product Storage Tank (19FPT006), Bagger (19FPB002), Surge Bin (19PSB002), Sitter (19FAS001), Cage Mill (19SCM001), Vibratory Screens (9) (19PVS001-009) all Controlled by Dust Collector (19MDC002)	16,338	30	1.12	4.91
Finished Product Storage Tank (19FPT003) and Dust Free Load-Out (19DFL003) Controlled by Dust Collector (19MDC003)	2,430	30	0.17	0.74
Finished Product Storage Tank (19FPT001), Bucket Elevator (19BEL004), both Controlled by Dust Collector (19MDC004)	4,860	30	0.33	1.45
Bucket Elevator (19BEL003) and Finished Product Storage Tank (19FPT002) Controlled by Dust Collector (19MDC005)	4,860	30	0.33	1.45
Bucket Elevator (19BEL005), and Dust Free Load-Out (19DFL002) Controlled by Dust Collector (19MDC007)	762	30	0.05	0.23

Permit #: 90020001  
 Mill #19

Attachment A

<u>Item of Equipment</u>	<u>Process Air Flow (scfm)</u>	<u>Process Wt. Rate (Ton/Hr)</u>	<u>Particulate Matter Emissions</u>	
			<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Bucket Elevator (19BEL002), Feed Tank With Vibratory Bin Bottom (19IFT002) and Surge Bin (19PSB001) Controlled by Dust Collector (19MDC008)	2,430	30	0.17	0.74
Finished Product Storage Tank (19FPT004) and Supersack Bagger (19SSB001) both Controlled by Dust Collector (19MDC009)	2,430	30	0.17	0.74
Bucket Elevator (19BEL006) and Two Finished Product Storage Tanks (19FPT005 and 008) Controlled by Dust Collector (19MDC010)	2,430	30	0.17	0.74
Dust Free Load-Out (12DFL004) Controlled by Dust Collector (19MDC011)	762	30	0.05	0.23
Surge Bin (19PSB001), Finished Product Tank (19FPT009) and Bucket Elevator (19BEL008) Controlled by Dust Collector (19MDC012)	6,750	30	0.46	2.03
Crusher (19HMM001), Screen (19PVS010), Bucket Elevator (19BEL007), Controlled by Dust Collector (19MDC013) and Belt Conveyor (19RBC003)	4,000	30	0.27	1.20
Dust Free Load-Out (19DFL001) Dust Free Articulating Load-Outs (2) (19ALO001-002) Controlled by a Cyclone (19MMC002) and Dust Collector (19MDC014)	2,000	30	0.14	0.61

Permit #: 90020001  
Mill #19

Attachment A

<u>Item of Equipment</u>	<u>Process Air Flow</u> <u>(scfm)</u>	<u>Process</u> <u>Wt. Rate</u> <u>(Ton/Hr)</u>	<u>Particulate Matter</u> <u>Emissions</u>	
			<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Two (2) Rock Hoppers (19ORH001 and 002)	-----	35	0.01	0.44 (x 2)

These limits are based on 0.008 gr/dscf PM emission limit, as requested by the applicant, 8,760 hours/year operating hours and information provided in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

MNP:jar

217/782-2113

"REVISED"  
OPERATING PERMIT

PERMITTEE

SEM Minerals, L.P.  
Attn: Paul Shelton  
3806 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 95060235                      I.D. No.: 001815AAS  
Applicant's Designation: PORTABLE      Date Received: June 29, 1995  
Subject: Portable Screening and Loading System  
Date Issued: July 26, 1995                      Expiration Date: July 26, 2000  
Location: 3150 Gardner Expressway, Quincy, Burton Township,  
Adams County

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of portable screening and loading system which includes a hopper, a feeder belt, a conveyor belt, and a 4' x 8' single deck screen as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. The portable screening system is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subpart A and 000. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b.    i.    Emissions of particulate matter from screening and transfer points on belt conveyors shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)).
- ii. At all times the Permittee shall also maintain and operate this equipment in a manner consistent with good air pollution control practice for minimizing emissions.
- 2. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours (Hr/Yr)</u>	<u>Operating Rate (Lb/Hr)</u>	<u>Particulate Matter</u>	
			<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Portable Screening and Loading System	480	6,600	0.87	0.21

These limits are based on standard emission factors and information provided in the application. Compliance with annual limits shall be determined from a running total of 12 months of data.

3. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.

If you have any questions on this, please call Manish N. Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MNP:jar

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

J. M. Huber Corporation  
Attn: Environmental Coordinator  
3150 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 96030291

I.D. No.: 001815AAS

Applicant's Designation: 20FCP002

Date Received: March 25, 1996

Subject: Modification to Mill-20

Date Issued: April 24, 1996

Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of hammer mill (20FCP002) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

It should be noted that this permit has been issued to add hammer mill to Mill-20, without any increase in emissions of PM into the atmosphere as indicated in the application.

If you have any questions on this, please call Manish Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MNP:jar

cc: Region 2



217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

J. M. Huber Corporation  
Attn: Rick Parise  
3806 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 96080105                      I.D. No.: 001815AAS  
Applicant's Designation:                      Date Received: August 27, 1996  
Subject: Mill-24 Iron Sulfate Pelletizer Plant  
Date Issued: November 14, 1996  
Location: 3806 Gardner Expressway, Quincy, Melrose Township,  
Adams County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of main mill furnace (24MMF001) and full circle pulverator (24FCP001) controlled by an existing dust collector (24MDC001) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Emissions of particulate matter from the iron sulfate pelletizer mill/baghouse shall not exceed nominal rates of 0.1 lb/hr and 0.44 ton/yr. This limit is based on the emission estimate provided in the permit application.
2. The Permittee shall operate the dust collector control equipment at all the time when Mill 24 is in operation.

It should be noted that this permit has been issued considering no increase in the PM emissions from the existing dust collector.

If you have any questions on this, please call Manish Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MNP:jar

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT - NSPS SOURCE

PERMITTEE

J. M. Huber Corporation  
Attn: Brian K. Cooley  
3150 Gardner Expressway  
Quincy, Illinois 62305-4005

Application No.: 97040114                      I.D. No.: 001815AAS  
Applicant's Designation: 19MMC002        Date Received: April 28, 1997  
Subject: Mill (19) Modification  
Date Issued: June 9, 1997  
Location: 3150 Gardner Expressway, Quincy, Melrose Township,  
Adams County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a new cyclone (19MMC002) and new dust collector (19MDC014) on existing dust-free loadout (19DFL001) and two (2) dust-free articulating loadouts (19ALO 001-002) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. The above listed sources are subject to New Source Performance Standards (NSPS) 40 CFR 60, Subparts A and 000. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
  - b. Particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
  - c. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
2. Operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Process Air Flow (scfm)</u>	<u>Process Weight Rate (Ton/Hr)</u>
Cyclone (19MMC002) and Dust Collector (19MDC014) on Existing Operating Line of Dust-Free Loadout (19DFL001) and Dust-Free Articulating Loadouts (2) (19ALO 001-002)	2,000	30

3. The Permittee shall not cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.

If you have any questions on this, please call Manish N. Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MNP:jar

Region 3

217/782-2113

"REVISED"  
JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

SEM Minerals, L.P.  
Attn: Paul Shelton  
3806 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 97080049  
Applicant's Designation: DIESELGENER  
Subject: 1,750 KW Diesel Generator  
Date Issued: November 18, 1997

I.D. No.: 001815AAS  
Date Received: August 18, 1997

Operating Permit Expiration  
Date: November 18, 2002

Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of one 1,750 kW diesel generator, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. Emissions and operation of the diesel generator shall not exceed the following limits:

<u>Air Pollutant</u>	<u>Emission Factor</u> (Lb/mmBtu)	<u>E M I S S I O N S</u>	
		<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
NO <sub>x</sub>	3.1	49.17	4.13
CO	0.81	12.85	1.08
SO <sub>2</sub>	0.055	0.87	0.07
VOC	0.09	1.43	0.12
PM	0.07	1.11	0.09

These limits are based on 168 hr/yr operation, a maximum heat input of 15.86 mmBtu/hr, and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. The diesel generator shall not operate for more than 168 hours per year.
- c. The annual throughput of diesel fuel for the diesel generator shall not exceed 20,496 gallons per year. This limit is based on the heat input of the generator (15.86 mmBtu/hr), heat content of diesel fuel (130,000 Btu/gal), and annual operating hours of 168 hours per year.
- d. At the above location, the Permittee shall not keep, store, or utilize:

- i. Distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the larger of the following two values:
  - A. 0.28 weight percent, or
  - B. the wt. percent given by the formula:  
$$\text{Maximum Wt. Percent Sulfur} = (0.000015) \times (\text{Gross Heating Value of Oil, Btu/lb})$$
- e. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 2. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
  - a. Operating hours of the generator (hr/yr).
  - b. Fuel consumption by the generator (gal/yr).

If you have any questions concerning this letter, please contact Brian Rodely at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:BER:jar

cc: Region 2

CONSTRUCTION PERMIT GRANT -- OPERATING PERMIT DENIAL -  
NSPS SOURCEPERMITTEE

J.M. Huber Corp.  
Attn: Regional Environmental Coordinator  
3150 Gardner Expressway  
Quincy, Illinois 62301

Application No: 98030106                      I.D. No.: 001815AAS  
Applicants Designation: 19RBC006              Date Received: March  
25, 1998  
Subject: Belt Conveyor  
Date Issued: June 22, 1998  
Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one belt conveyor (19RBC006) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This conveyor is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and 000. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- c. particulate matter emissions from vents or stacks shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and 7 percent opacity (40 CFR 60.672(a)).
- d. Fugitive emissions of particulate matter from grinding mills, screens (except from truck dumping), bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)).
- e. Fugitive emissions of particulate matter from the crushers (except from truck dumping), shall not exceed 15 percent opacity, (40 CFR 60.672(c) and (d)).

- f. Particulate matter emissions shall not exceed 0.05 gm/dscm (0.022 gr/dscf) and there shall be no visible emissions from the buildings enclosing affected belt conveyors and mills (40 CFR 60.672(e)).
- 2. The Permittee shall notify the Illinois EPA as required by 40 CFR 60.7, including:
  - a. Commencement of construction
  - b. Anticipated date of initial startup
  - c. Actual date of initial startup
  - d. Expected date of commencing monitoring system performance demonstration
- 3. These sources may be operated for 180 days under this construction permit.
- 4. Performance tests shall be conducted within 60 days after each source achieves maximum production, but not later than 180 days after initial startup, using the methods specified in 40 CFR 60.675.
- 5. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
 Division of Air Pollution Control  
 Compliance Section (#40)  
 1021 N Grand Ave. East  
 P.O. Box 19276  
 Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
 Division of Air Pollution Control  
 5415 North University  
 Peoria, Illinois 61614

- 6. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	Maximum Throughput (lb/hr)	Particulate Matter Emissions	
		<u>(lb/hr)</u>	<u>(ton/yr)</u>
Belt Conveyor	60,000	0.27	1.18

These limits are established to ensure that 40 CFR 52, prevention of significant deterioration (PSD) rules are not triggered based on maximum throughput and associated emissions of the belt conveyor as described in the permit application.

The OPERATING permit application is DENIED because the Illinois Environmental Protection Act, Section 9, and 35 Ill. Adm. Code 201.160 might be violated.

Pursuant to Section 201.160, an operating permit may not be issued until the equipment has been constructed or modified in accordance with applicable conditions in this construction permit. The Illinois EPA suggests that you reapply for the operating permit after the construction is completed in accordance with the construction permit. This information must be submitted in duplicate and should reference the application and I.D. numbers assigned above.

If you have any questions on this, please call Brian Rodely at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:BER:psj

cc: Illinois EPA, FOS Region 2  
USEPA



Two different grade granular minerals will be unloaded via super sack unloaders onto circular disc conveyors (GRNCDC003 and 004). They material will be conveyed into the mixer (GRNPMX003) and then to the finished product bagger (GRNFPP003).

2.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
GRNCDC001	Disc Conveyor	None
GRNCDC002	Disc Conveyor	None
GRNCDC003	Disc Conveyor	None
GRNCDC004	Disc Conveyor	None
GRNFPT001	Finished Product Storage	Baghouse (GRNBVN001)
GRNFPT002	Finished Product Storage	Baghouse (GRNBVN002)
GRNPMX001	Mixer	Baghouse (GRNMDC001)
GRNPMX002	Mixer	Baghouse (GRNMDC001)
GRNPMX003	Mixer	Baghouse (GRNMDC001)
GRNFPP001	Finished Product Bagger	Baghouse (GRNMDC001)
GRNFPP002	Finished Product Bagger	Baghouse (GRNMDC001)
GRNFPP003	Finished Product Bagger	Baghouse (GRNMDC001)

2.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected system" for the purpose of these unit-specific conditions, is the granite elite processing system, listed above, for which construction or modification commenced on or after April 14, 1972.
- b. 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 determined by using the equation [35 IAC 212.321]:

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

Where:

P = Process weight rate  
E = Allowable emission rate

For process weight rates up to 408 Mg/hr (450 ton/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	ton/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

2.1.4 Non-Applicability of Regulations of Concern

None

2.1.5 Operational and Production Limits and Work Practices

The Permittee shall follow good operating practices for the filters, including periodic inspection, routine maintenance and prompt repair of defects.

2.1.6 Emission Limitations

- a. Emissions and operation of the affected system shall not exceed the following limits:

<u>Emission Unit</u>	<u>Particulate Matter (PM<sub>10</sub>) Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
GRNPMX001, 002, 003 and GRNFPT001, 002, 003 (All Controlled by Main Baghouse)	0.28	3.30
GRNFPT001	0.18	2.06
GRNFPT002	0.18	2.06

These calculations are figured from emission factor of 0.022 gr/scf and total flow of 4000 scfm for the main baghouse and a total flow of 2500 scfm for the

other two baghouses for the finished product storage. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. This permit is issued based on negligible emissions of particulate matter from the disc conveyors (GRNCDC001, 002, 003, and 004) and the hand dump point at the mixer (GRNPMX001). For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.

2.1.7 Testing Requirements

None

2.1.8 Monitoring Requirements

None

2.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the system to demonstrate compliance:

- a. Throughput of product rate of for the system in tons/month and tons/year.
- b. The aggregate monthly and yearly particulate matter emissions from the system, based on the throughput rate, enclosure control efficiency, filter efficiency, and the operating schedule, with supporting calculations.

2.1.10 Reporting Requirements

The Permittee shall notify the Illinois EPA of any record showing violation of emission limit in Condition 2.1.6 within 30 days of such an occurrence of the violation.

2.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

2.1.12 Compliance Procedures

- a. Compliance with the particulate matter limitations in this section is assured and achieved by the proper operation and

maintenance of fabric filters as required by this permit and the work practices inherent in operation of the affected system.

- b. Compliance with emission limitations of Condition 2.1.6 shall be determined based on the recordkeeping requirements of Condition 2.1.9 (a) and (b) or formula listed below:

$$\text{ER (lb/hr)} = \text{EF (gr/scf)} \times 1 \text{ lb/7,000 gr} \\ \times \text{FLOW (ft}^2\text{/min)} \times 60 \text{ min/hr}$$

Where:

ER = Emission rate in lb/hr  
EF = Emission factor in gr/scf  
FLOW = Total flow for dust collector in scfm

If you have any questions on this, please call Robin Helmerichs at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RBH:jar

cc: Region 2





Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. As a consequence of above condition, this permit is issued based on plant modification in construction permits (99050094, 99050074, 99050033, 99050055, and 99050067) not constituting a new major source or major modification subject to Prevention of Significant Deterioration (PSD), 40 CFR 52.21.
- 5a. Permittee shall keep monthly records of the following items:
- i. Material throughput of each emission unit.
  - ii. Particulate matter emissions with calculation for each emission unit.
- b. These records shall be retained for at least three years and shall be available to the Illinois EPA for inspection and copying upon request.

If you have any questions on this, please call Minesh Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MVP:jar

cc: Region 2



- i. Diesel fuel usage (gallon/month)
- ii. NO<sub>x</sub> and Co emissions.
- b. These records shall be kept for at least three years and shall be available for inspection and copying by the Illinois EPA upon request.

If you have any questions on this, please call Minesh Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MVP:psj

cc: Region 2

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

J. M. Huber Corporation  
Attn: Brian K. Cooley  
3150 Gardner Expressway  
Quincy, Illinois 62301

<u>Application No.:</u> 99050074	<u>I.D. No.:</u> 001815AAS
<u>Applicant's Designation:</u> 03MDC004	<u>Date Received:</u> May 20, 1999
<u>Subject:</u> Mill 3 Bin Vents and Tank	
<u>Date Issued:</u> November 1, 1999	<u>Operating Permit Expiration</u>
	<u>Date:</u> November 1, 2004
<u>Location:</u> 3150 Gardner Expressway, Quincy	

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of one finished product storage tank (03FPT005) with bin vent (03MDC005) and one bin vent (03MDC004) to control existing finished product storage tank (03FPT004) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation of the emission source(s) included in this permit shall not begin until all associated air pollution control equipment has been constructed and is operational.
2. PM-10 emissions and operation of each bin vent shall not exceed 0.57 lb/hour and 2.48 tons/year. These limits are based on the manufacturer's emission rate (0.022 gr/scf) and maximum flow rate (3000 scfm). Compliance with annual limits shall be determined based on the 12 months of data.
- 3a. The Permittee shall maintain monthly records of the following limits:
  - i. Material throughput; and
  - ii. PM-10 emissions with calculation.
- b. These records shall be maintained for at least three years and shall be available for inspection and copying by the Illinois EPA upon request.

If you have any questions on this, please call Minesh Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MVP:psj

cc: Region 2

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

J. M. Huber Corporation  
Attn: Brian K. Cooley  
3150 Gardner Expressway  
Quincy, Illinois 62301

<u>Application No.:</u> 99050094	<u>I.D. No.:</u> 001815AAS
<u>Applicant's Designation:</u> 13 BAGGER	<u>Date Received:</u> May 27, 1999
<u>Subject:</u> Mill 13 Bagger and Tank	
<u>Date Issued:</u> November 1, 1999	<u>Operating Permit Expiration Date:</u> November 1, 2004
<u>Location:</u> 3150 Gardner Expressway, Quincy	

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of one new bagger controlled by existing dust collector (13MDC001) and move finish product tank from Mill 17 to Mill 13 and control by existing dust collector (13MDC001) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Operation of the emission source(s) included in this permit shall not begin until all associated air pollution control equipment has been constructed and is operational.
2. Particulate matter emissions and operation of finish product bagger and finish product tank controlled by dust collector (13MDC001) shall not exceed 1.96 lb/hr and 8.58 ton/yr. These limits are based on manufacturer's guaranteed emission rate (0.022 gr/scf) and maximum flow rate (10,384 scfm). Compliance with annual limit shall be determined from running total of 12 months of data.
- 3a. Permittee shall maintain records of following items:
  - i. Material throughput (lb/month); and
  - ii. PM emissions with sample calculation (lb/month and ton/yr).
- b. These records shall be maintained for at least three years and shall be available for inspection and copying by the Illinois EPA upon request.

If you have any questions on this, please call Minesh Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:MVP:jar

cc: Region 2

217/782-2113

CONSTRUCTION PERMIT - NSPS SOURCES

PERMITTEE

J. M. Huber Corporation  
Attn: Herbert E. Becton  
3150 Gardner Expressway  
Quincy, Illinois 62301

Application No.: 00060041      I.D. No.: 001815AAS  
Applicant's Designation: WFEEDSYST      Date Received: June 13, 2000  
Subject: Feed System to Mill 10  
Date Issued: September 7, 2000  
Location: 3150 Gardner Expressway, Quincy

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of one stock feedsystem for Mill 10 (including one rock hopper, two rubber belt conveyors, and one lump buster) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This stock feed system is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and 000. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
2. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
3. Fugitive emissions of particulate matter from grinding mills, screens (except from truck dumping), bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent opacity, (40 CFR 60.672(b) and (d)).
4. This permit is issued based on negligible emissions of particulate matter from stock feed system for Mill 10. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
5. The Permittee shall notify the Illinois EPA as required by 40 CFR 60.7, including:
  - a. Commencement of construction

- b. Actual date of initial startup
6. These sources may be operated for 180 days under this construction permit.
- 7a. Within 60 days after each source achieves maximum production, but not later than 180 days after initial startup pursuant to 40 CFR 60.675 and 60.8, the opacity from the affected facilities shall be measured during conditions which are representative of the maximum performance. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- b.
    - i. The following methods and procedures shall be used for opacity measurements.  
  
USEPA Method 9, 40 CFR 60 Appendix A
    - ii. A test shall consist of 30 sets of 24 consecutive observations.
- c. Opacity measurements shall be performed by a certified observer.
- d. The Illinois EPA shall be notified prior to these measurements to enable the Illinois EPA to observe these measurements. Notification of the expected date of the measurements shall be submitted to a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of measurement shall be submitted a minimum of five (5) working days prior to the actual date of the measurement. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the measurements.
8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
5415 North University  
Peoria, Illinois 61614

10.4 Attachment 4 - 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: \_\_\_\_\_

## 10.5 Attachment 5 - 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;
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
  - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.
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; and
- Are not required to be processed as a significant permit modification.

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 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.



10.7 Attachment 7 - 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

Page 4

Permit Section (MC 11)  
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