

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

217/782-2113

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

Dixon-Marquette Cement, Inc.
Attn: Tim Kinsley
1914 White Oak lane
Dixon, Illinois 61021

Application No.: 95090025 I.D. No.: 103806AAC
Applicant's Designation: Date Received: September 6, 1995
Operation of: Portland cement Manufacturing
Date Issued: TO BE DETERMINED Expiration Date²: DATE
Source Location: 1914 White Oak lane, Dixon, Lee County
Responsible Official: Tim Kinsley

This permit is hereby granted to the above-designated Permittee to OPERATE Portland cement Manufacturing Plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

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

DES:MJP:psj

cc: Illinois EPA, FOS, Region 2
USEPA

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit.

² Except as provided in condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Dixon-Marquette Cement, Inc.
1914 White Oak Lane
Dixon, Illinois 61021
815-284-3357

I.D. No.: 103806AAC
Standard Industrial Classification: 3241, Cement Manufacturing

1.2 Owner/Parent Company

Dixon-Marquette Cement, Inc.
1914 White Oak Lane
Dixon, Illinois 61021

1.3 Operator

Dixon-Marquette Cement, Inc.
1914 White Oak Lane
Dixon, Illinois 61021

Tim Kinsley
815-284-3357

1.4 General Source Description

The important steps in the production of Portland cement are as follows:

Raw material processing (crushing and screening);
Raw material preparation (proportioning and grinding);
Raw material mixing and blending to create kiln feed;
Pyroprocessing of the kiln feed to form Portland cement clinkers;
Clinker cooling and storage;
Finish milling (grinding clinker to form Portland cement); and
Packaging and shipment of Portland cement.

Raw materials, consisting mainly of limestone, are trucked to a designed crushing facility, near the quarry, where the material undergoes both a primary and secondary crushing operation. After achieving the desired size, the material is moved through a series of conveyors to the raw milling process where it is dried, ground, proportioned, and prepared for pyroprocessing. Depending on market conditions, not all raw material undergoes the raw

milling process but instead is either sold as construction aggregates or conveyed to storage piles.

Prior to raw milling, the material is mixed with clay and sand. During raw milling the mixture is ground to the appropriate size for pyroprocessing. This homogeneous mixture is referred to as kiln feed.

The prepared kiln feed is fed to one of four pyroprocessing systems; each including a rotary kiln. Three of the four also utilize preheater to enhance thermal efficiency.

The rotary kiln is the heart of the Portland cement process since the chemical reactions necessary to produce Portland cement take place here. The rotary kiln is a slightly inclined, slowly rotating steel tube that is lined with refractory material. The rotation of the kiln causes the solid materials to be slowly transported downhill from the feed end. Fuel (a mixture of coal and coke) is supplied at the lower or discharge end. The hot, gaseous combustion products move countercurrent to the material flow, thereby transferring heat to the solids in the kiln.

The product of the rotary kiln is somewhat glassy and spherical mass known as clinker. After cooling, the clinker is either stored for future use or mixed with gypsum and a grinding aid and ground in the finish mill to produce Portland cement.

The Portland cement is then conveyed to storage silos where it will remain until either shipped in bulk or packaged and shipped in paper bags. Shipping methods include truck and rail.

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 |
| °C | Degrees Celsius |
| 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 |
| Cm | Centimeter |
| ERMS | Emission Reduction Market System |
| °F | Degrees Fahrenheit |
| Ft ² | Feet square |
| ft ³ | Cubic foot |
| gal | Gallon |
| Gm | Gram |
| 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 |
| In | Inch |
| °K | degrees Kelvin |
| Kg | kilo gram |
| KW | Kilowatts |
| kpa | Kilopascals |
| lb | Pound |
| MACT | Maximum Available Control Technology |
| mmcf | Million cubic feet |
| MG | Mega Gram |
| M | Meter |
| mmBtu | Million British thermal units |
| mmHg | Millimeters of mercury |
| mo | Month |
| MW | Mega Watts |
| NO _x | Nitrogen Oxides |
| NSPS | New Source Performance Standards |

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| | |
|------------------|---|
| OM | Organic Material |
| PM | Particulate Matter |
| PM ₁₀ | 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 ₂ | 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:

- 1 Control room comfort heater Natural Gas 550,000 Btu/hr
- 1 Natural gas fired boiler for winter use 4.6 mmBtu/hr

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:

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:

| Number of Activities | Activity Description | 35 IAC Regulatory Citation |
|-------------------------|---|----------------------------------|
| 1 | Control room comfort heater Natural Gas 550,000 Btu/hr | 201.210(a)(4A) |
| 1 | Control room comfort heater Oil fired 500,000 Btu/hr | 201.210(a)(4B) |
| 1 | Quarry garage heater, Used oil 260,000 Btu/hr | 201.210(a)(4B) |

3.1.4 The Permittee has 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 | Plant emission unit | Description |
|------------------------------------|---------------------------------------|--|
| 01 | Crushing plant | Truck dump (TD-2) |
| | | Apron conveyor feeder (13-003) |
| | | Primary crusher (13-005) |
| | | Apron feeder (13-006) |
| | | Conveyor belt (13-007) |
| | | Secondary crusher (13-008) |
| | | Conveyor belt (13-009) |
| | | Vibrating screen (13-010) |
| | | Vibrating screen (13-011) |
| | | Conveyor belt (13-016) |
| | | Conveyor belt (13-017) |
| | | Conveyor belt (13-012) |
| | | Truck dump (TD-1) |
| | | Apron conveyor feeder (C1) |
| | | Primary crusher (C) |
| | | Conveyor belts (3,4,7) |
| | | Secondary crusher (H) |
| Three deck screens (F,G) | | |
| Conveyor belts (5,6,9,10) | | |
| 02 | Raw mill #1 and #2 | Feed/recirculating elevator #1 (21-033) |
| | | Air separator #1 (21-036) |
| | | Air separator #2 (21-136) |
| | | Raw mill #2 & air furnace 1 unit (7.3 mmBtu/hr) (21-139) |
| | | Feed/recirculating elevator #2 (21-133) |
| | | Raw mill #2 & air furnace 2 units (14 mmBtu/hr) (21-040) |
| | Homogenizing & kiln feed distribution | Homogenization silos #1 & #2 (HS-1, HS-2) |
| | | Homogenization silos #3 (HS-3) |
| | | Bucket elevator #1, #2 (21-225 & 21-226) |
| | | Kiln feeder #1 (21-230) |
| | | Kiln feeder #2 (21-232) |
| | | Kiln feeder #3 (21-234) |
| | Regrind mill | Regrind mill #1 (41-412) |
| | | Regrind mill separator #1 (41-416) |
| | | Crushed stone silo (CSS-1) |
| | | Cement silo (CS-1) |
| | | Regrind mill #2 (41-435) |
| Regrind mill separator #2 (41-439) | | |
| Crushed stone silo (CSS-2) | | |

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| Emission Unit | Plant emission unit | Description | |
|---------------|--|---|--|
| 02 (Cont.) | Regrind mill (Continued) | Cement silo (CS-2) | |
| | Cement silos | Large cement silos #1-#6 and Small cement silos #7-#14 (CS-3) | |
| | | Masonry silos #15-#18 (MS) | |
| | | Bulk loading tank (West) | |
| | | Old bulk loading silo (BLS-1) | |
| | | Old bulk loading silo (BLS-2) | |
| | | New bulk loading silo (BLS-3) | |
| | | New bulk loading silo (BLS-4) | |
| | | Old truck/rail loadout-east ((L-1) | |
| | | Old truck/rail loadout-west ((L-2) | |
| | | New truck/rail loadout-east ((L-3) | |
| | | New truck/rail loadout-west ((L-4) | |
| | | Cement pump (81-014) | |
| | | Side spouts on silo (11) (SS-1) | |
| | | Cement and colored mortar packing | Bucket elevator #1 (81-153) |
| | | | Packer feeder & packing machine #3 (81-150 ,151) |
| | Bucket elevator #4 (81-161) | | |
| | Packer feeder & packing machine #4 (81-158 ,159) | | |
| | Bucket elevator #5 (81-168) | | |
| | Packer feeder & packing machine #5 (81-165 ,166) | | |
| | Bucket elevator #6 (81-175) | | |
| | Packer feeder & packing machine #6 (81-172 ,173) | | |
| | Bucket elevator #7 (81-182) | | |
| | Packer feeder & packing machine #7(81-179 ,180) | | |
| | Bucket elevator #2(81-189) | | |
| | Packer feeder & packing machine #8 (81-186 ,187) | | |
| | Colored mortar silo (CMS-1) | | |
| | Hopper Blender/Packer #1 (PM-1) | | |
| | Hopper Blender/Packer #2 (PM-2) | | |
| | Clinker handling | Clinker elevator #4 West (32-314) | |
| | | Clinker elevator #4 East (32-313) | |
| | | Clinker belt #4 (32-316) | |
| | | Clinker elevator (CE-1) | |
| | | Clinker transfer belt (32-140) | |
| | | Clinker transfer belt (32-141) | |
| | | Clinker reclaim hopper (32-536) | |
| | Vibrator feeder (32-537) | | |

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| Emission Unit | Plant emission unit | Description |
|---------------|---------------------------------|--|
| 02 (Cont.) | Clinker handling (Continued) | Transfer belt (32-538) |
| | | Transfer belt (32-539) |
| | | Conveyor belt (32-503) |
| | | Conveyor belt (32-504) |
| | | Vibrator feeder (32-502) |
| | | Coal hopper (32-501) |
| | Clinker cooler | Clinker cooler #1 (32-015) |
| | | Clinker cooler #2 (32-118) |
| | | Clinker cooler #3 (32-131) |
| | | Clinker cooler #4 (32-302) |
| | Finish mills | Finish mill #1 (41-220) with separator #1 (41-023) |
| | | Finish mill #2 (41-073) with separator #2 (41-086) |
| | | Finish mill #3 (41-204) with separator #3 (41-220) |
| | | Finish mill #4 (41-313) with separator #4 (41-338) |
| | | Rod mill (41-307) |
| | | Bucket elevator (41-309) |
| | Kilns | Rotary kiln #1 with preheater (32-100) |
| | | Rotary kiln #2 with preheater (32-113) |
| | | Rotary kiln #3 with preheater (32-026) |
| | | Rotary kiln #4 with preheater (32-250) |
| | 03 | Generator |
| 04 | Fugitive | Fugitive emission sources |

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 NO_x, PM and SO₂ 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. The source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to Illinois EPA, Compliance Section.

5.2.8 CAM Plan

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

5.3 Non-Applicability of Regulations of Concern

None

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) | 27.1 |
| Sulfur Dioxide (SO ₂) | 1245.1 |
| Particulate Matter (PM) | 2392.9 |
| Nitrogen Oxides (NO _x) | 1766.9 |
| HAP, not included in VOM or PM | |
| Total | 5432.0 |

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

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

specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 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.

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6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 - Quarry Crushing System

7.1.1 Description

Quarry Crushing Operation:

In the quarry crushing operation, excavated limestone is dumped via truck onto an apron feeder. Limestone emitted as fugitive dust, occurs when the trucks dump. If the limestone is not received wet enough from the quarry, water can be sprayed on the material to prevent serious dusting. The limestone is then fed to the primary crusher. At the primary crusher, particulate-matter is emitted. The "Primary Quarry Crushing System" emissions will be controlled by a jet pulse fabric filter (#DC-1). The crushed limestone is then screened for size. All material of the appropriate size will be delivered through a series of conveyors to the raw milling area. The screening and material handling operations emit particulate matter. Again, the "Primary Quarry Screening and Handling System" emissions will be controlled by two jet pulse fabric filters (#DC-2 and #DC-3). A back-up water spray system is available to control dust in case of fabric filter failure. Other purchase pre-crushed and screened material will be fed into the old secondary crushing system (crusher and screens have been removed) for transfer to the milling area. The secondary handling operations emit particulate matter. All particulate-matter emissions generated by the secondary operations handling equipment are uncontrolled.

7.1.2 List of Emission Units and Pollution Control Equipment

| Crushing system | Description | Emission Control Equipment |
|-----------------|--------------------------------|----------------------------|
| Standby | Truck dump (TD-2) | -- |
| | Apron conveyor feeder (13-003) | -- |
| | Primary crusher (13-005) | Wet suppression |
| | Apron feeder (13-006) | -- |
| | Conveyor belt (13-007) | -- |
| | Secondary crusher (13-008) | Dust collector (DC-10) |
| | Conveyor belt (13-009) | -- |
| | Vibrating screen (13-010) | -- |
| | Vibrating screen (13-011) | -- |

| Crushing system | Description | Emission Control Equipment |
|--------------------|----------------------------|----------------------------|
| Standby (Cont.) | Conveyor belt (13-016) | -- |
| | Conveyor belt (13-017) | -- |
| | Conveyor belt (13-012) | -- |
| Active | Truck dump (TD-1) | -- |
| | Apron conveyor feeder (C1) | -- |
| | Primary crusher (C) | Dust collector (DC-1) |
| | Conveyor belts (3,4,7) | -- |
| | Secondary crusher (H) | Dust collector (DC-2) |
| | Three deck screens (F,G) | Dust collector |
| | Conveyor belts (5,6,9,10) | -- |

Note: The application does not provide information on date of construction of the above equipment. The operating permit #72120834 indicates applicability of 40 CFR 60 Subparts A and OOO -- Standards of Performance for Nonmetallic Mineral Processing Plants and 40 CFR 52.21, Prevention of Significant Deterioration (PSD) (See Attachment 4).

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected aggregate crushing" 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 aggregate crushing is subject to the emission limits identified in Condition 5.2.2.
- c. The affected aggregate crushing is subject to 40 CFR 60 Subparts A and OOO--Standards of Performance for Nonmetallic Mineral Processing Plants. 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).
- d. The affected aggregate crushing is subject to 35 IAC Part 212 Subpart L, Particulate Matter Emissions From Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected aggregate crushing is 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 PM₁₀, 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 aggregate crushing 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 baghouses, including periodic inspection, routine maintenance and prompt repair of defects.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected aggregate crushing is subject to the following:

- a. The affected aggregate crushing is subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4)
- b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

- 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].

7.1.7 Testing Requirements

- a. The affected aggregate crushing is 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 aggregate crushing is subject to the applicable testing requirements in 35 IAC Part 212 Subpart A. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).
- c. The affected aggregate crushing is 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 4).

7.1.8 Monitoring Requirements

None

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 aggregate crushing 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. The affected aggregate crushing is subject to the applicable recordkeeping requirements in 35 IAC Part 212, Subparts A and S. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).
- b. The affected aggregate crushing is 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 4).
- c. Records addressing use of good operating practices for the baghouses:

- i. Records for periodic inspection of the baghouses 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 aggregate crushing shall be maintained, based on aggregate 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 aggregate crushing 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. The affected aggregate crushing is subject to the applicable reporting requirements in 35 IAC Part 212, Subparts A and S. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).
- b. The affected aggregate crushing is subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).
- c. 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

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

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To determine compliance with Conditions 5.5.1, 7.1.3 and 7.1.6, PM emissions from the affected aggregate crushing plant shall be calculated based on the emission rates from the State Construction and Operating Permits (See Attachment 4) and/or applicable emission factors for crushed stone processing, Table 11.19.2-2, AP-42, Volume I, Fifth Edition, Supplement D, January, 1995.

7.2 Unit 02: Cement plant

7.2.1 Description

Raw Milling Operation:

The second step in the manufacture of Portland cement is the preparation of the raw materials for pyroprocessing. This operation combines the blending of appropriate raw materials with particle-size reduction through grinding. The grinding is accomplished by two ball mills (#21-040 and #21-139). Each ball mill has an air separator to separate materials of adequate fineness. The coarse particles are returned for additional grinding. In addition to the air separators, the ball mills also utilize natural gas firing air furnaces. These air furnaces reduce the moisture content in the raw material to less than 1%.

The particulate-matter emissions generated by the ball mills and air separators are controlled by a series of cyclones and fabric filters. Three cyclones (CYC-R1, CYC-R2, and CYC-R3) along with three reverse air filters (#21-047, #21-051, and #21-054) control emissions from ball mill #21-040 and air separator #21-036. Three cyclones (CYC-R4, CYC-R5, and CYC-R6) along with two reverse air filters (#21-147 and #21-144) control ball mill #21-139 and air separator #21-136). In addition, the air furnaces generate both nitrogen oxides and carbon monoxides. These emissions are uncontrolled.

Homogenization Silos:

The process materials from the raw milling operation are sent to the homogenization silos. In the homogenization silos, the dry raw material is blend and stored as kiln feed until it is fed to the pyroprocessing system. The kiln feed is transported to the pyroprocessing system by a variety of conveying mechanisms. These include screw conveyors, belt conveyors, drag conveyors, air slides, bucket elevators, and pneumatic pumping. Most transfer points are enclosed. Any fugitive dust emissions generated by this transport process are captured by fabric filters before venting outdoors. Two reverse air fabric filters (#21-201 and #21-204) are used to control these emissions.

Pyroprocessing:

The next step in the manufacture of Portland cement is the pyroprocessing of kiln feed into Portland cement clinker. One of the major steps in the process of manufacturing Portland cement is the chemical change known as "clinkering" which is performed in the rotary kilns. Three of these kilns are equipped with suspension type preheaters where hot gases from the kiln are intermingled with the raw material. The raw feed adsorbs heat from the gases prior to being delivered to the kiln. The gases are passed through to fabric filters before being discharged to the atmosphere. There is no separate firing for the preheaters; in effect they are extension of the kilns. In the kilns the kiln feed is heated to a temperature of about 2,800°F to produce clinker. The fuel used in the kilns is a mixture of coal and coke.

The Dracco reverse air fabric filter (#31-039) controls particulate emissions, which include lead from the combustion of coal, from Kilns #1-#3 and associated preheaters. The wheelabrator reverse air fabric filter (#32-267) control particulate and lead emissions from Kiln #4. The dust collected is composed of partially calcined kiln feed. A portion of the dust is returned to the process. The remainder of the waste is deposited in designated clinker kiln dust (CKD) piles near the quarry.

The principal gases emissions from the pyroprocessing system are nitrogen oxides, sulfur oxides, and carbon monoxide. The sulfur oxides and nitrogen oxides result primarily from the combustion of coal. For the most part these emissions are uncontrolled, although, due to the alkaline nature of cement, some of the sulfur oxides may be absorbed by the pyroprocessing system itself, thereby reducing the quantity of sulfur oxide emissions to the exhaust system.

Clinker Cooling:

The clinker produced by the rotary kiln is cooled in a device called a clinker cooler. The clinker is cooled by ambient air to a temperature that can be handled by the clinker conveyor system. The emissions from this process are generally a dust composed of cement minerals with a small amount of lead from fuel combustion. These emissions are controlled by cyclones (CYC-C1, CYC-C2, CYC-C3, and CYC-C4) and a gravel bed filter (#32-350). The gravel bed consists of quartz granules lying on a wire

mesh. Dust from the dirty gases passing through the bed of quartz, dropout and remain in the bed. The gravel bed filter is able to withstand the high temperatures found in this environment.

Clinker Handling and Storage:

Conveyors and bucket elevators are again used to transport the cooled clinker to either storage piles or to the finish mill. Most transfer points are enclosed and/or connected to reverse air fabric filters (#32-149 and #32-317). Some uncontrolled fugitive dust emissions do result from wind erosion of the outdoor clinker storage piles.

Finish Milling:

The final step in the manufacture of Portland cement is the grinding of the Portland cement clinker to a fine powder. This process is called finish milling. The finish mill is a type of ball mill using steel alloy balls as the grinding media. Clinker, gypsum, and a small amount of grinding aid are fed into one end of the mill, and ground Portland cement exists from the other end. The finish mills operate in conjunction with air separators which separate acceptable size cement particles from those that have not been fully ground.

During the finish milling process, particulate-matter emissions are generated from the mills, air separators, and material handling system. This particulate-matter may contain some lead which was captured by the cement clinker during pyroprocessing. Again, the lead is from coal/coke combustion. The emissions are controlled by five pulse air type fabric filters (#41-018, #41-080, #41-210, #41-324, and #41-310) and one reverse air fabric filter (#41-328).

Packing and Loading:

The finished Portland cement is next conveyed to large cylindrical concrete storage silos where it will remain until either packaged or loaded onto rail cars or trucks for bulk shipment. Nearly all of the Portland cement will be bulk shipped. If the cement is packaged, it will be placed in paper bags by automatic packing machines.

Particulate-matter emissions arise from the storage silo loading and unloading process, cement handling conveyors,

bulk loading operations, and packaging. The emissions are controlled by fabric filters. Both pulse air and shaker type fabric filters (#81-008, #81-001, #81-005, and #DC-8) are used to control dust from the storage silos. The particulate emissions from rail and truck bulk loading are controlled by eight pulse air fabric filters. The particulate emissions from the packing machines are controlled by seven shaker type fabric filters.

7.2.2 List of Emission Units and Pollution Control Equipment

| Source | Description | Control Equipment | *Date Constructed |
|---------------------------------------|---|--|-------------------|
| Raw mill #1 and #2 | Feed/recirculating elevator #1 (21-033) | Dust collector #3 | 1963 |
| | Air separator #1 (21-036) | Dust collectors #1, #2, Raw mill cyclones #1,#2,#3 | 1963 |
| | Air separator #2 (21-136) | Dust collectors #4, #5, Raw mill cyclones #4, #5, #6 | 1955 |
| | Raw mill #2 & air furnace 1 unit (7.3 mmBtu/hr)(21-139) | Dust collector #4 | 1956 |
| | Feed/recirculating elevator #2 (21-133) | Dust collector #5 | 1946 |
| | Raw mill #2 & air furnace 2 units (14 mmBtu/hr)(21-040) | Dust collectors #1, #2 | 1958 |
| Homogenizing & kiln feed distribution | Homogenization silos #1 & #2 (HS-1, HS-2) | Dust collector (21-201) | 1960 |
| | Homogenization silos #3 (HS-3) | Dust collector (21-201) | 1960 |
| | Bucket elevator #1, #2 (21-225 & 21-226) | Dust collector (21-204) | 1960 |
| | Kiln feeder #1 (21-230) | Dust collector (21-204) | 1960 |
| | Kiln feeder #2 (21-232) | Dust collector (21-204) | 1960 |
| | Kiln feeder #3 (21-234) | Dust collector (21-204) | 1960 |
| | Kiln feeder #4 (21-236) | Dust collector (21-204) | 1960 |

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| Source | Description | Control Equipment | *Date Constructed |
|--------------|---|---|-------------------|
| Regrind mill | Regrind mill #1 (41-412) | Dust collector (41-421) | 1956 |
| | Regrind mill separator #1 (41-416) | Dust collector (41-421) | 1956 |
| | Crushed stone silo (CSS-1) | Dust collector (41-400) | 1956 |
| | Cement silo (CS-1) | Dust collector (41-400) | 1956 |
| | Regrind mill #2 (41-435) | Dust collector (41-444) | 1956 |
| | Regrind mill separator #2 (41-439) | Dust collector (41-444) | 1956 |
| | Crushed stone silo (CSS-2) | Dust collector (41-400) | 1956 |
| | Cement silo (CS-2) | Dust collector (41-400) | 1956 |
| Cement silos | Large cement silos #1-#6 and Small cement silos #7-#14 (CS-3) | Dust collector (81-001) for large & Dust collector (81-005) for small | 1956 |
| | Masonry silos #15-#18 (MS) | Dust collector (81-005) | 1956 |
| | Bulk loading tank (West) | Dust collector (81-025) | 1964 |
| | Old bulk loading silo (BLS-1) | Dust collector (81-400) | 1959 |
| | Old bulk loading silo (BLS-2) | Dust collector (81-400) | 1959 |
| | New bulk loading silo (BLS-3) | Dust collector (DC-4) | 1964 |
| | New bulk loading silo (BLS-4) | Dust collector (DC-5) | 1964 |
| | Old truck/rail loadout-east ((L-1) | Dust collector (81-413) | Unknown |
| | Old truck/rail loadout-west ((L-2) | Dust collector (81-426) | Unknown |
| | New truck/rail loadout-east ((L-3) | Dust collector (DC-6) | Unknown |
| | New truck/rail loadout-west ((L-4) | Dust collector (DC-7) | Unknown |
| | Cement pump (81-014) | Dust collector (81-008) | 1959 |

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| Source | Description | Control Equipment | *Date Constructed |
|--|--|-------------------------------|-------------------|
| Cement silos (Continued) | Side spouts on silo (11) (SS-1) | None | 1956 |
| Cement and colored mortar packing | Bucket elevator #1 (81-153) | Dust collector #3 (81-155) | 1979 |
| | Packer feeder & packing machine #3 (81-150, 151) | | |
| | Bucket elevator #4 (81-161) | Dust collector #4 (81-162) | 1979 |
| | Packer feeder & packing machine #4 (81-158, 159) | | |
| | Bucket elevator #5 (81-168) | Dust collector #5 (81-169) | 1979 |
| | Packer feeder & packing machine #5 (81-165, 166) | | |
| | Bucket elevator #6 (81-175) | Dust collector #6 (81-176) | 1979 |
| | Packer feeder & packing machine #6 (81-172, 173) | | |
| | Bucket elevator #7 (81-182) | Dust collector #7 (81-183) | 1979 |
| | Packer feeder & packing machine #7(81-179, 180) | | |
| | Bucket elevator #2(81-189) | Dust collector #8 (81-191) | 1982 |
| | Packer feeder & packing machine #8 (81-186, 187) | | |
| | Colored mortar silo (CMS-1) | Dust collector (DC-8) | 1979 |
| | Hopper Blender/Packer #1 (PM-1) | Dust collector (DC-9) | 1979 |
| Hopper Blender/Packer #2 (PM-2) | | | |
| Clinker handling | Clinker elevator #4 West (32-314) | Dust collector (32-317) | 1968 |
| | Clinker elevator #4 East (32-313) | | |
| | Clinker belt #4 (32-316) | | 1970 |

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| Source | Description | Control Equipment | *Date Constructed | |
|---------------------------------|--|--|-------------------|------|
| Clinker handling (Continued) | Clinker elevator (CE-1) | Dust collector (32-149) & Dust collector (21-204) | 1970 | |
| | Clinker transfer belt (32-140) | | | |
| | Clinker transfer belt (32-141) | | | |
| | Clinker reclaim hopper (32-536) | | 1969 | |
| | Vibrator feeder (32-537) | Dust collector (32-541) | 1969 | |
| | Transfer belt (32-538) | | | |
| | Transfer belt (32-539) | | | |
| | Conveyor belt (32-503) | | | 1969 |
| | Conveyor belt (32-504) | | | 1969 |
| | Vibrator feeder (32-502) | | | 1969 |
| | Coal hopper (32-501) | | | 1969 |
| Clinker cooler | Clinker cooler #1 (32-015) | Drop out box (DOB-1), Cooler cyclone (CYC-1) Gravel bed | 1976 | |
| | Clinker cooler #2 (32-118) | Drop out box (DOB-2), Cooler cyclone (CYC-2), Gravel bed | 1976 | |
| | Clinker cooler #3 (32-131) | Drop out box (DOB-3), Cooler cyclone (CYC-3), Gravel bed | 1976 | |
| | Clinker cooler #4 (32-302) | Drop out box (DOB-4), Cooler cyclone, (CYC-4), Gravel bed | 1976 | |
| Finish mills | Finish mill #1 (41-220) with separator #1 (41-023) | Dust collector #1 (41-018) | 1955 | |
| | Finish mill #2 (41-073) with separator #2 (41-086) | Dust collector #2 (41-080) | 1955 | |
| | Finish mill #3 (41-204) with separator #3 (41-220) | Dust collector #3 (41-210) | 1955 | |

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| Source | Description | Control Equipment | *Date Constructed |
|-----------------------------|--|---|-------------------|
| Finish mills (Continued) | Finish mill #4 (41-313) with separator #4 (41-338) | Dust collector (41-328) for mill #4, Dust collector (41-324) for separator #4 | 1955 |
| | Rod mill (41-307) | Dust collector (41-310) | 1968 |
| | Bucket elevator (41-309) | | |
| Kilns | Rotary kiln #1 with preheater (32-100) | Dust collector (31-030 & Drop out box (DOB-5) | 1956 |
| | Rotary kiln #2 with preheater (32-113) | | |
| | Rotary kiln #3 with preheater (32-026) | | |
| | Rotary kiln #4 with preheater (32-250) | Dust collector (32-267) & Multicyclone (CYC-K4) | 1960 |

* State Construction and Operating Permits (Attachment 4) provides dates of latest modification..

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected cement plant" 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 cement plant is subject to the emission limits identified in Condition 5.2.2.
- c. The affected cement plant is subject to 40 CFR 60 Subparts A and F--Standards of Performance for Portland cement plants. 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).
- d. The affected cement plant is subject to 35 IAC Part 212 Subpart L, Particulate Matter Emissions From Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

- e. The affected cement plant is subject to 35 IAC Part 212 Subpart Q, Particulate Matter Emissions From Stone, Clay, Glass and Concrete Manufacturing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).
- f. The affected cement plant is subject to 35 IAC Part 214 Subpart K, Sulfur Limitations from Process Emission Sources. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).
- g. 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 cement plant, 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 (see Attachment 3).
- h. The affected cement plant is subject to 40 CFR 60 Subparts A and y--Standards of Performance for new pulverized solid fuel firing system under coal preparation plants. 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).
- i. The affected cement plant is subject to the NESHAP for the Portland cement manufacturing industry, 40 CFR 63 Subparts A and LLL. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. This regulation is attached hereto and incorporated herein by reference (see Attachment 2).

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected cement plant is 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 PM₁₀, as identified in 35 IAC 212.324(a)(1).
- b. The affected cement kiln is not subject to 35 IAC 216.121 for emissions of carbon monoxide because the kiln is not by definition a fuel combustion emission unit.

- c. The affected cement kiln is not subject to 35 IAC 217.121 for emissions of nitrogen oxides because the kiln is not by definition a fuel combustion emission unit.

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 aggregate crushing 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 baghouses, including periodic inspection, routine maintenance and prompt repair of defects.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected cement plant is subject to the following:

- a. The affected cement plant is subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).
- b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD) [T1].
- 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 cement plant is 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 cement plant is subject to the applicable testing requirements in 35 IAC Part 212 Subpart A. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).
- c. The affected cement plant is 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 4).

7.2.8 Monitoring Requirements

- a. The affected cement plant is subject to the applicable monitoring requirements in 40 CFR 60.63. This regulation is attached hereto and incorporated herein by reference (see Attachment 1).

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 cement plant 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. The affected cement plant is subject to the applicable recordkeeping requirements in 35 IAC Part 212, Subparts A and S. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).
- b. The affected cement plant is 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 4).
- c. Records addressing use of good operating practices for the baghouses:

- i. Records for periodic inspection of the baghouses 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. The affected cement plant is subject to the applicable recordkeeping requirements in 40 CFR 60.65. These regulations are attached hereto and incorporated herein by reference (see Attachment 1).
- e. Monthly and aggregate annual NO_x, PM, SO₂, and VOM emissions from the affected cement plant shall be maintained, based on material throughput/production, 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 cement plant 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. The affected cement plant is subject to the applicable reporting requirements in 35 IAC Part 212, Subparts A and S. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).
- b. The affected cement plant is subject to the applicable reporting requirements established in State Construction and Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4).
- c. The affected cement plant is subject to the applicable reporting requirements in 40 CFR 60.65. These regulations are attached hereto and incorporated herein by reference (see Attachment 1).
- d. Emissions of NO_x, PM, SO₂, and/or VOM in excess of limits in Condition 7.2.6 within 30 days of such an occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

To determine compliance with Conditions 5.5.1, 7.2.3 and 7.2.6, emissions from the affected cement plant shall be calculated based on the emission rates from the State Construction and Operating Permits (See attachment 4) and/or applicable emission factors for Portland cement manufacturing, Section 11.6, AP-42, Volume I, Fifth Edition, Supplement D, January, 1995.

7.3 Unit 03 - Natural Gas Fired Generators

7.3.1 Description

Six natural gas fired engines are used for generating electricity on site during periods when peak charges apply.

7.3.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Engine | Heat input | Date of Construction |
|---------------|-------------|-------------|----------------------|
| G 1-6 | Caterpillar | 22 mmBtu/hr | 1993 |

7.3.3 Applicability Provisions and Applicable Regulations

- a. The "affected engine" for the purpose of these unit-specific conditions is an emission unit described in conditions 7.3.1 and 7.3.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].
- d. Each affected engine is subject to the emission limits identified in Condition 5.2.2.

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected engine is not subject to the requirements of 35 IAC 212.321 or 212.322 because due to the unique nature of these units, a process weight rate can not be set so that such rules can not reasonably be applied.
- b. The affected engine is not subject to 35 IAC 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected engine is not by definition a fuel combustion emission unit.

7.3.5 Operational and Production Limits and Work Practices

- a. Natural Gas shall be the only fuel fired in the affected engine.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected engines are subject to the following:

None

Emission limits for PM, VOM, NO_x and CO are not set for the affected engines, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for these pollutants pursuant to Title I of the CAA, specifically 40 CFR 52.21, Prevention of Significant Deterioration (PSD).

7.3.7 Testing Requirements

None

7.3.8 Monitoring Requirements

None

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 engine to demonstrate compliance with Conditions 5.5.1 and 7.1.3, pursuant to Section 39.5(7)(b) of the Act:

- a. The affected engine is subject to the applicable recordkeeping requirements in 35 IAC Part 212, Subparts A and S. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).
- b. The affected engine is 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 4).
- c. Hours of operation of the engines (hr/mo, hr/yr).

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected engine 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:

None

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

- a. Compliance provisions addressing Condition 7.3.3(b) and (c) are not set by this permit as compliance is assumed to be achieved by the normal work practices and maintenance activities inherent in operation of the affected gas engines.
- b. Compliance with the emission limits in Condition 5.5 from the affected engines shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

| Pollutant | lb/hr |
|------------------|-------|
| VOM _x | 2.52 |
| NO _x | 3.51 |
| CO | 10.6 |

Emission factors are from the application based on actual field test data

Gas Engine Emissions (ton/year) = The Appropriate
Emission Factor [lb/hr] x Actual Operating Hours
[hours/year] x 0.0005 [ton/lb]

7.4 Unit 04 - Fugitive Emissions

7.4.1 Description

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

7.4.2 List of Emission Units

| Description |
|--|
| Fugitive emissions-Stockpiles: Coal piles 1 thru 9 Cement kiln dust piles 1 &2 Gypsum piles 1 thru 3 Clinker piles 1 thru 8 Primecrush Aggregate piles 1 thru 3 Aggfinish piles 1 thru 6 |
| Fugitive Emissions-Other equipment: Conveyors Hoppers Vibratory feeders Loader dump Screens |

7.4.3 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 7.4.1 and 7.4.2.
- b. The affected fugitive emission sources are subject to 35 IAC Part 212 Subpart K, Fugitive Particulate Matter. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).

7.4.4 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.

7.4.5 Operational and Production Limits and Work Practices

None

7.4.6 Emission Limitations

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

- a. The affected fugitive emission sources are subject to emission limitations established in State Construction and Operating Permits, which have been attached hereto and incorporated herein by reference (see Attachment 4)
- b. The limitations in the State Construction and Operating Permits were established pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD) [T1].
- 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].

7.4.7 Testing Requirements

None

7.4.8 Inspection Requirements

None

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 fugitive emission sources 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. The affected fugitive emission sources are subject to the applicable recordkeeping requirements in 35 IAC Part 212, Subparts A and S. These regulations are attached hereto and incorporated herein by reference (see Attachment 3).

- b. The affected fugitive emission sources 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 4).

7.4.10 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.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the limits in Conditions 5.5.1 shall be based on the recordkeeping requirements in Condition 7.7.9 and the emission factors listed below:

- a. To determine compliance with Conditions 5.5.1, 7.4.3 and 7.4.6, PM emissions from the affected fugitive emission sources shall be calculated based on the applicable emission factors for Fugitive dust sources, Section 13.2, AP-42, Volume I, Fifth Edition, Supplement D, January, 1995.

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 _____ **{insert public notice start date}** (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

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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

The following permits and attachments contain applicable requirements to this source and are an integral part of this permit. The permit conditions contained in these attachments should be thoroughly reviewed and complied with, including all emission limitations, monitoring, record keeping and reporting. Any requirements these permits and attachments that conflict with those requirements found in Sections 3 through 9 are superseded by those found in Sections 3 through 9.

10.1 Attachment 1 - Applicable New Source Performance Standards (NSPS)

10.1.1 40 CFR 60 Subpart 000 -- Standards of Performance for
Nonmetallic Mineral Processing Plants

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10.1.2 40 CFR 60 Subpart F -- Standards of Performance for
Portland Cement Plants

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Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
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10.1.3 40 CFR 60 Subpart Y -- Standards of Performance for Coal
Preparation Plants

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10.2 Attachment 2 - Applicable National Emission Standards for
Hazardous Air Pollutants (NESHAP)

10.2.1 40 CFR 63 Subpart LLL -- National Emission Standards for
Hazardous Air Pollutants: Portland Cement Manufacturing
Industry

10.3 Attachment 3- Applicable Regulations from 35 Illinois
Administrative Code, Subtitle B: Air Pollution,
Chapter I: Pollution Control Board

10.3.1 35 IAC Part 212, Emission Standards and Limitations for
Visible and Particulate Matter Emissions from Stationary
Sources

SUBPART A: GENERAL

Section 212.100 Scope and Organization

- a) This Part contains standards and limitations for visible and particulate matter emissions from stationary emission units.
- b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.
- c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.
- d) This Part includes Subparts which are arranged as follows:
 - 1) Subpart A: General Provisions;
 - 2) Subpart B: Visible Emissions;
 - 3) Subparts C-J: Incinerators and Fuel Combustion Emission Units;
 - 4) Subparts K-M: Fugitive and Process Emission Units;
 - 5) Subparts N-T: Site specific and industry specific rules; and
 - 6) Subpart U: Additional control measures.
- e) Rules have been grouped for the convenience of the public; the scope of each is determined by its language and history.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.107 Measurement Method for Visible Emissions

For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Subpart, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Subpart shall not apply to Section 212.301 of this Part.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.108 Measurement Methods for PM-10 Emissions and Condensable PM-10 Emissions

- a) Emissions of PM-10 shall be measured by any of the following methods at the option of the owner or operator of an emission unit.
 - 1) Method 201, 40 CFR part 51, Appendix M, incorporated by reference in Section 212.113 of this Subpart.
 - 2) Method 201A, 40 CFR part 51, Appendix M, incorporated by reference in Section 212.113 of this Subpart.
 - 3) Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Subpart, provided that all particulate matter measured by Method 5 shall be considered to be PM-10.
- b) Emissions of condensable PM-10 shall be measured by Method 202, 40 CFR part 51, Appendix M, incorporated by reference in Section 212.113 of this Subpart.
- c) The volumetric flow rate and gas velocity for stack test methods shall be determined in accordance with Methods 1, 1A, 2, 2A, 2C, 2D, 3, or 4, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Subpart.
- d) Upon a written notification by the Illinois Environmental Protection Agency (Agency), the owner

or operator of a PM-10 emission unit subject to this Section shall conduct the applicable testing for PM-10 emissions, condensible PM-10 emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Agency within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Agency.

- e) A person planning to conduct testing for PM-10 or condensible PM-10 emissions to demonstrate compliance shall give written notice to the Agency of that intent. Such notification shall be given at least thirty (30) days prior to initiation of the test unless a shorter pre-notification is agreed to by the Agency. Such notification shall state the specific test methods from subsection (a) of this Section that will be used.
- f) The owner or operator of an emission unit subject to this Section shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- g) This Section shall not affect the authority of the United States Environmental Protection Agency (USEPA) under Section 114 of the Clean Air Act (CAA) (42 U.S.C. § 7414 (1990)).

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.109 Measurement Methods for Opacity

Except as otherwise provided in this Part, and except for the methods of data reduction when applied to Sections 212.122 and 212.123 of this Part, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in Section 212.113 of this Subpart, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at

right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.110 Measurement Methods For Particulate Matter

- a) Measurement of particulate matter emissions from stationary emission units subject to this Part shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, as incorporated by reference in Section 212.113 of this Subpart.
- b) The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, incorporated by reference in Section 212.113 of this Subpart.
- c) Upon a written notification by the Agency, the owner or operator of a particulate matter emission unit subject to this Part shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Agency within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Agency.
- d) A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Agency of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Agency. Such notification shall state the specific test methods from this Section that will be used.
- e) The owner or operator of an emission unit subject to this Part shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- f) This Section shall not affect the authority of the USEPA under Section 114 of the CAA.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.111 Abbreviations and Units

a) The following abbreviations are used in this Part:

| | |
|-----------------|---|
| btu | British thermal units (60 1/4°F) |
| dscf | dry standard cubic foot |
| ft | foot |
| ft ² | square feet |
| fpm | feet per minute |
| gal | gallon |
| gr | grains |
| gr/scf | grains per standard cubic foot |
| gr/dscf | grains per dry standard cubic foot |
| hr | hour |
| J | Joule |
| kg | kilogram |
| kg/MW-hr | kilograms per megawatt-hour |
| km | kilometer |
| L | liter |
| lbs | pounds |
| lbs/hr | pounds per hour |
| lbs/mmbtu | pounds per million btu |
| m | meter |
| m ² | square meters |
| mph | miles per hour |
| mg | milligram |
| mg/scm | milligrams per standard cubic meter |
| mg/dscm | milligrams per dry standard cubic meter |
| mg/L | milligrams per liter |
| Mg | megagram, metric ton or tonne |
| mi | mile |
| mmbtu | million British thermal units |
| mmbtu/hr | million British thermal units per hour |
| MW | megawatt; one million watts |
| MW-hr | megawatt-hour |
| ng | nanogram; one billionth of a gram |
| ng/J | nanograms per Joule |
| scf | standard cubic foot |
| scfm | standard cubic feet per minute |
| scm | standard cubic meter |
| T | short ton (2000 lbs) |
| yd ² | square yards |

- b) The following conversion factors have been used in this Part:

| English | Metric |
|-------------------|----------------------------|
| 2.205 lb | 1 kg |
| 1 T | 0.907 Mg |
| 1 lb/T | 0.500 kg/Mg |
| mmbtu/hr | 0.293 MW |
| 1 lb/mmbtu | 1.548 kg/MW-hr or 430 ng/J |
| 1 mi | 1.61 km |
| 1 gr | 64.81 mg |
| 1 gr/scf | 2289 mg/scm |
| 1 ft ² | 0.0929 m ² |
| 1 ft | 0.3048 m |
| 1 gal | 3.785 L |

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.112 Definitions

The definitions of 35 Ill. Adm. Code 201 and 211 apply to this Part.

(Source: Added and codified at 7 Ill. Reg. 13591)

Section 212.113 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

- a) 40 CFR part 60, Appendix A (1991):
- 1) Method 1: Sample and Velocity Traverses for Stationary Sources;
 - 2) Method 1A: Sample and Velocity Traverses for Stationary Source with Small Stacks or Ducts;
 - 3) Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S pitot tube);
 - 4) Method 2A: Direct Measurement of Gas Volume Through Pipes and Small Ducts;

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- 5) Method 2C: Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube);
 - 6) Method 2D: Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts;
 - 7) Method 3: Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight;
 - 8) Method 4: Determination of Moisture Content in Stack Gases;
 - 9) Method 5: Determination of Particulate Emissions From Stationary Sources;
 - 10) Method 5A: Determination of Particulate Emissions From the Asphalt Processing and Asphalt Roofing Industry;
 - 11) Method 5D: Determination of Particulate Matter Emissions From Positive Pressure Fabric Filters;
 - 12) Method 5E: Determination of Particulate Emissions From the Wool Fiberglass Insulation Manufacturing Industry;
 - 13) Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources;
 - 14) Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.
- b) 40 CFR part 51 Appendix M (1994):
- 1) Method 201: Determination of PM-10 Emissions;
 - 2) Method 201A: Determination of PM-10 Emissions (Constant Sampling Rate Procedure);
 - 3) Method 202: Determination of Condensable Particulate Emissions from Stationary Sources.
- c) 40 CFR 60.672(b), (c), (d) and (e) (1991).
- d) 40 CFR 60.675(c) and (d) (1991).

- e) ASAE Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers, American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085.
- f) U.S. Sieve Series, ASTM-E11, American Society of Testing Materials, 1916 Race Street, Philadelphia, PA 19103.
- g) Standard Methods for the Examination of Water and Wastewater, Section 209C, "Total Filtrable Residue Dried at 103 - 105° C," 15th Edition, 1980, American Public Health Association, 1015 Fifteenth Street, N.W., Washington, D.C. 20005.
- h) "Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events," U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards Monitoring and Data Analysis Division, Research Triangle Park, N.C. 27711, EPA-450/4-86-007 July 1986.
- i) "Guideline on Air Quality Models (Revised)," U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, EPA-450/2-78-027R July 1986.
- j) 40 CFR 50, Appendix K (1992), "Interpretation of the National Ambient Air Quality Standard for Particulate Matter".

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

SUBPART B: VISIBLE EMISSIONS

Section 212.121 Opacity Standards (Repealed)

(Source: Repealed at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.122 Visible Emissions Limitations for Certain Emission Units For Which Construction or Modification Commenced On or After April 14, 1972

- a) No person shall cause or allow the emission of smoke or other particulate matter into the atmosphere from any fuel combustion emission unit for which

construction or modification commenced on or after April 14, 1972, with actual heat input greater than 73.2 MW (250 mmbtu/hr), having an opacity greater than 20 percent.

- b) The emissions of smoke or other particulate matter from any such emission unit may have an opacity greater than 20 percent but not greater than 40 percent for a period or periods aggregating 3 minutes in any 60 minute period, providing that such opaque emission permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person and provided further that such opaque emissions permitted from each such fuel combustion emission unit shall be limited to 3 times in any 24 hour period.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.123 Visible Emissions Limitations for All Other Emission Units

- a) 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 Section 212.122 of this Subpart.
- b) The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.124 Exceptions

- a) Sections 212.122 and 212.123 of this Subpart shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 Ill. Adm. Code 201.
- b) Sections 212.122 and 212.123 of this Subpart shall not apply to emissions of water or water vapor from an emission unit.
- c) An emission unit which has obtained an adjusted opacity standard pursuant to Section 212.126 of this Subpart shall be subject to that standard rather than the limitations of Section 212.122 or 212.123 of this Subpart.
- d) Compliance with the particulate regulations of this Part shall constitute a defense.
 - 1) For all emission units which are not subject to Chapters 111 or 112 of the CAA and Sections 212.201, 212.202, 212.203 or 212.204 of this Part but which are subject to Sections 212.122 or 212.123 of this Subpart: the opacity limitations of Sections 212.122 and 212.123 of this Subpart shall not apply if it is shown that the emission unit was, at the time of such emission, in compliance with the applicable particulate emissions limitations of Subparts D through T of this Part.
 - 2) For all emission units which are not subject to Chapters 111 or 112 of the CAA but which are subject to Sections 212.201, 212.202, 212.203 or 212.204 of this Part:
 - A) An exceedance of the limitations of Section 212.122 or 212.123 of this Subpart shall constitute a violation of the applicable particulate limitations of Subparts D through T of this Part. It shall be a defense to a violation of the applicable particulate limitations if, during a subsequent performance test conducted within a reasonable time not to exceed 60 days, under the same operating conditions for the unit and the control devices, and in accordance with Method 5,

40 CFR part 60, incorporated by reference in Section 212.113 of this Part, the owner or operator shows that the emission unit is in compliance with the particulate emission limitations.

- B) It shall be a defense to an exceedance of the opacity limit if, during a subsequent performance test conducted within a reasonable time not to exceed 60 days, under the same operating conditions of the emission unit and the control devices, and in accordance with Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, the owner or operator shows that the emission unit is in compliance with the allowable particulate emissions limitation while, simultaneously, having visible emissions equal to or greater than the opacity exceedance as originally observed.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.125 Determination of Violations

Violations of Sections 212.122 and 212.123 of this Subpart shall be determined:

- a) By visual observations conducted in accordance with Section 212.109 of this Part; or
- b) By the use of a calibrated smoke evaluation device approved by the Agency as specified in Subpart J of 35 Ill. Adm. Code 201; or
- c) By the use of a smoke monitor located in the stack and approved by the Agency as specified in Subpart J or L of 35 Ill. Adm. Code 201.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.126 Adjusted Opacity Standards Procedures

- a) Pursuant to Section 28.1 of the Environmental Protection Act (Act) [415 ILCS 5/28.1], and in

accordance with 35 Ill. Adm. Code 106, Subpart E, provisions for adjusted standards for visible emissions for emission units subject to Sections 212.201, 212.202, 212.203, or 212.204 of this Part shall be granted by the Board to the extent consistent with federal law based upon a demonstration by such owner or operator that the results of a performance test conducted pursuant to this Section, Section 212.110 of this Part, and Methods 5 and 9 of 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, show that the emission unit meets the applicable particulate emission limitations at the same time that the visible emissions exceed the otherwise applicable standards of Sections 212.121 through 212.125 of this Subpart. Such adjusted opacity limitations:

- 1) Shall be specified as a condition in operating permits issued pursuant to 35 Ill. Adm. Code 201 and Section 39.5 of the Act;
 - 2) Shall substitute for that limitation otherwise applicable;
 - 3) Shall not allow an opacity greater than 60 percent at any time; and
 - 4) Shall allow opacity for one six-minute averaging period in any 60 minute period to exceed the adjusted opacity standard.
- b) For the purpose of establishing an adjusted opacity standard, any owner or operator of an emission unit which meets the requirements of subsection (a) of this Section, may request the Agency to determine the average opacity of the emissions from the emission unit during any performance tests conducted pursuant to Section 212.110 of this Part and Methods 5 and 9 of 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part. The Agency shall refuse to accept the results of emissions tests if not conducted pursuant to this Section.
- c) Any request for the determination of the average opacity of emissions shall be made in writing, shall include the time and place of the performance test and test specifications and procedures, and shall be

submitted to the Agency at least thirty (30) days before the proposed test date.

- d) The Agency will advise the owner or operator of an emission unit which has requested an opacity determination of any deficiencies in the proposed test specifications and procedures as expeditiously as practicable but no later than ten (10) days prior to the proposed test date so as to minimize any disruption of the proposed testing schedule.
- e) The owner or operator shall allow Agency personnel to be present during the performance test.
- f) The method for determining an adjusted opacity standard is as follows:
 - 1) A minimum of 60 consecutive minutes of opacity readings obtained in accordance with Test Method 9, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, shall be taken during each sampling run. Therefore, for each performance test (which normally consists of three sampling runs), a total of three sets of opacity readings totaling three hours or more shall be obtained. Concurrently, the particulate emissions data from three sampling runs obtained in accordance with Test Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, shall also be obtained.
 - 2) After the results of the performance tests are received from the emission unit, the status of compliance with the applicable particulate emissions limitation shall be determined by the Agency. In accordance with Test Method 5, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, the average of the results of the three sampling runs must be less than the allowable particulate emission rate in order for the emission unit to be considered in compliance. If compliance is demonstrated, then only those test runs with results which are less than the allowable particulate emission rate shall be considered as acceptable test runs for the

purpose of establishing an adjusted opacity standard.

- 3) The opacity readings for each acceptable sampling run shall be divided into sets of 24 consecutive readings. The six (6) minute average opacity for each set shall be determined by dividing the sum of the 24 readings within each set by 24.
 - 4) The second highest six (6) minute average opacity obtained in subsection (f)(3) of this Section shall be selected as the adjusted opacity standard.
- g) The owner or operator shall submit a written report of the results of the performance test to the Agency at least thirty (30) days prior to filing a petition for an adjusted standard with the Board.
- h) If, upon review of such owner's or operator's written report of the results of the performance tests, the Agency determines that the emission unit is in compliance with all applicable emission limitations for which the performance tests were conducted, but fails to comply with the requirements of Section 212.122 or 212.123 of this Subpart, the Agency shall notify the owner or operator as expeditiously as practicable, but no later than twenty (20) days after receiving the written report of any deficiencies in the results of the performance tests.
- i) The owner or operator may petition the Board for an adjusted visible emission standard pursuant to 35 Ill. Adm. Code 106. Subpart E. In addition to the requirements of 35 Ill. Adm. Code 106. Subpart E, the petition shall include the following information:
- 1) A description of the business or activity of the petitioner, including its location and relevant pollution control equipment;
 - 2) The quantity and type of materials discharged from the emission unit or control equipment for which the adjusted standard is requested;
 - 3) A copy of any correspondence between the petitioner and the Agency regarding the

- performance tests which form the basis of the adjusted standard request;
- 4) A copy of the written report submitted to the Agency pursuant to subsection (g) of this Section;
 - 5) A statement that the performance tests were conducted in accordance with this Section and the conditions and procedures accepted by the Agency pursuant to Section 212.110 of this Part;
 - 6) A statement regarding the specific limitation requested; and
 - 7) A statement as to whether the Agency has sent notice of deficiencies in the results of the performance test pursuant to subsection (h) of this Section and a copy of said notice.
- j) In order to qualify for an adjusted standard the owner or operator must justify as follows:
- 1) That the performance tests were conducted in accordance with Test Methods 5 and 9, 40 CFR part 60, Appendix A, incorporated by reference in Section 212.113 of this Part, and the conditions and procedures accepted by the Agency pursuant to Section 212.110 of this Part;
 - 2) That the emission unit and associated air pollution control equipment were operated and maintained in a manner so as to minimize the opacity of the emissions during the performance tests; and
 - 3) That the proposed adjusted opacity standard was determined in accordance with subsection (f) of this Section.
- k) Nothing in this Section shall prevent any person from initiating or participating in a rulemaking, variance, or permit appeal proceeding before the Board.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

SUBPART K: FUGITIVE PARTICULATE MATTER

Section 212.301 Fugitive Particulate Matter

No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.302 Geographical Areas of Application

- a) Sections 212.304 through 212.310 and 212.312 of this Subpart shall apply to all mining operations (SIC major groups 10 through 14), manufacturing operations (SIC major groups 20 through 39 except for those operations subject to Subpart S of this Part (Grain-Handling and Grain-Drying Operations) that are outside the areas defined in Section 212.324(a)(1) of this Part), and electric generating operations (SIC group 491), which are located in the areas defined by the boundaries of the following townships, notwithstanding any political subdivisions contained therein, as the township boundaries were defined on October 1, 1979, in the following counties:

| | |
|--------------|---|
| Cook: | All townships |
| Lake: | Shields, Waukegan, Warren |
| DuPage: | Addison, Winfield, York |
| Will: | DuPage, Plainfield, Lockport, Channahon, Peotone, Florence, Joliet |
| Peoria: | Richwoods, Limestone, Hollis, Peoria, City of Peoria |
| Tazewell: | Fondulac, Pekin, Cincinnati, Groveland, Washington |
| Macon: | Decatur, Hickory Point |
| Rock Island: | Blackhawk, Coal Valley, Hampton, Moline, South Moline, Rock Island, South Rock Island |
| LaSalle: | LaSalle, Utica |
| Madison: | Alton, Chouteau, Collinsville, Edwardsville, Fort Russell, Godfrey, Granite City, Nameoki, Venice, Wood River |
| St. Clair | Canteen, Caseyville, Centerville, St. Clair, Stites, Stookey, Sugar Loaf, Millstadt. |

- b) In the geographical areas defined in Section 212.324(a)(1) of this Part, Sections 212.304 through 212.310, 212.312, and 212.316 of this Subpart shall apply to all emission units identified in subsection (a) of this Section, and shall further apply to the following operations: grain-handling and grain-drying (Subpart S of this Part), transportation, communications, electric, gas, and sanitary services (SIC major groups 40 through 49). Additionally, Sections 212.304 through 212.310, 212.312, and 212.316 of this Subpart shall apply to wholesale trade-farm supplies (SIC Industry No. 5191) located in the vicinity of Granite City, as defined in Section 212.324(a)(1)(C) of this Part.
- c) Emission units must comply with subsection (b) of this Section by May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.304 Storage Piles

- a) All storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 45.4 Mg per year (50 T/yr) which are located within a source whose potential particulate emissions from all emission units exceed 90.8 Mg/yr (100 T/yr) shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.
- b) Subsection (a) of this Section shall not apply to a specific storage pile if the owner or operator of that pile proves to the Agency that fugitive particulate emissions from that pile do not cross the property line either by direct wind action or reentrainment.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.305 Conveyor Loading Operations

All conveyor loading operations to storage piles specified in Section 212.304 of this Subpart shall utilize spray

systems, telescopic chutes, stone ladders or other equivalent methods in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.306 Traffic Areas

All normal traffic pattern access areas surrounding storage piles specified in Section 212.304 of this Subpart and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312 of this Subpart.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.307 Materials Collected by Pollution Control Equipment

All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

(Source: Amended at 3 Ill. Reg. 45, p. 100, effective October 26, 1979)

Section 212.308 Spraying or Choke-Feeding Required

Crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

(Source: Amended at 3 Ill. Reg. 45, p. 100, effective October 26, 1979)

Section 212.309 Operating Program

- a) The emission units described in Sections 212.304 through 212.308 and Section 212.316 of this Subpart shall be operated under the provisions of an operating program, consistent with the requirements set forth in Sections 212.310 and 212.312 of this Subpart, and prepared by the owner or operator and submitted to the Agency for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- b) The amendment to this Section incorporating the applicability of Section 212.316 shall apply by May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.310 Minimum Operating Program

As a minimum the operating program shall include the following:

- a) The name and address of the source;
- b) The name and address of the owner or operator responsible for execution of the operating program;
- c) A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
- d) Location of unloading and transporting operations with pollution control equipment;
- e) A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

- f) Estimated frequency of application of dust suppressants by location of materials; and
- g) Such other information as may be necessary to facilitate the Agency's review of the operating program,

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.312 Amendment to Operating Program

The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with this Subpart and shall be submitted to the Agency for its review.

(Source: Amended at 3 Ill. Reg. 45, p. 100, effective October 26, 1979)

Section 212.313 Emission Standard for Particulate Collection Equipment

If particulate collection equipment is operated pursuant to Sections 212.304 through 212.310 and 212.312 of this Subpart, emissions from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf).

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.314 Exception for Excess Wind Speed

Section 212.301 of this Subpart shall not apply and spraying pursuant to Sections 212.304 through 212.310 and 212.312 of this Subpart shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.315 Covering for Vehicles

No person shall cause or allow the operation of a vehicle of the second division as defined 625 ILCS 5/1-217, or a semi-trailer as defined by 625 ILCS 5/1-187, without a covering sufficient to prevent the release of particulate matter into the atmosphere, provided that this rule shall not pertain to automotive exhaust emissions.

(Board Note: Pursuant to Section 10(E) of the Act, Section 212.315 cannot be more strict than Section 15-109 of the Vehicle Code [625 ILCS 5/15-109.1],)

(Source: Repealed at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.316 Emissions Limitations for Emission Units in Certain Areas

- a) Applicability. This Section shall apply to those operations specified in Section 212.302 of this Subpart and that are located in areas defined in Section 212.324(a)(1) of this Part.
- b) Emission Limitation for Crushing and Screening Operations. No person shall cause or allow fugitive particulate matter emissions generated by the crushing or screening of slag, stone, coke or coal to exceed an opacity of 10 percent.
- c) Emission Limitations for Roadways or Parking Areas. No person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, except that the opacity shall not exceed 5 percent at quarries with a capacity to produce more than 1 million T/yr of aggregate.
- d) Emission Limitations for Storage Piles. No person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent, to be measured four ft from the pile surface.
- e) Additional Emissions Limitations for the Granite City Vicinity as Defined in Section 212.324(a)(1)(C) of this Part.

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I.D. No.: 103806AAC
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- 1) Emissions Limitations for Roadways or Parking Areas Located at Slag Processing Facilities or Integrated Iron and Steel Manufacturing Plants. No person shall cause or allow fugitive particulate matter emissions from any roadway or parking area located at a slag processing facility or integrated iron and steel manufacturing plant to exceed an opacity of 5 percent.
- 2) Emissions Limitations for Marine Terminals.
 - A) No person shall cause or allow fugitive particulate matter emissions from any loading spouts for truck or railcar to exceed an opacity of 10 percent; and
 - B) No person shall cause or allow fugitive particulate matter emissions generated at barge unloading, dump pits, or conveyor transfer points including, but not limited to, transfer onto and off of a conveyor to exceed an opacity of 5 percent.
- f) Emission Limitation for All Other Emission Units. Unless an emission unit has been assigned a particulate matter, PM-10, or fugitive particulate matter emissions limitation elsewhere in this Section or in Subparts R or S of this Part, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent.
- g) Recordkeeping and Reporting
 - 1) The owner or operator of any fugitive particulate matter emission unit subject to this Section shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of this Section and shall submit to the Agency an annual report containing a summary of such information.
 - 2) The records required under this subsection shall include at least the following:
The name and address of the source;

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- A) The name and address of the owner and/or operator of the source;
 - B) A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;
 - C) For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical.
 - D) For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and
 - E) A log recording incidents when control measures were not used and a statement of explanation.
- 3) Copies of all records required by this Section shall be submitted to the Agency within ten (10) working days after a written request by the Agency and shall be transmitted to the Agency by a company-designated person with authority to release such records.
 - 4) The records required under this Section shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Agency representatives during working hours.
 - 5) A quarterly report shall be submitted to the Agency stating the following: the dates any necessary control measures were not implemented, a listing of those control

measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of this Section. This report shall be submitted to the Agency thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.

- h) Compliance Date. Emission units shall comply with the emissions limitations and recordkeeping and reporting requirements of this Section by May 11, 1993, or upon initial start-up, whichever occurs later.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

**SUBPART L: PARTICULATE MATTER EMISSIONS FROM
PROCESS EMISSION SOURCES**

**Section 212.321 Process Emission Units For Which
Construction or Modification Commenced On or After
April 14, 1972**

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

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

where

P = Process weight rate; and

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E = Allowable emission rate; and,

- 1) Up to process weight rates of 408 MG/hr (450 T/hr):

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

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

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

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

| Metric | | English | |
|--------|-------|---------|--------|
| P | E | P | E |
| Mg/hr | kg/hr | T/hr | lbs/hr |
| 0.05 | 0.25 | 0.05 | 0.55 |
| 0.1 | 0.29 | 0.10 | 0.77 |
| 0.2 | 0.42 | 0.20 | 1.10 |
| 0.3 | 0.64 | 0.30 | 1.35 |
| 0.4 | 0.74 | 0.40 | 1.58 |
| 0.5 | 0.84 | 0.50 | 1.75 |
| 0.7 | 1.00 | 0.75 | 2.40 |
| 0.9 | 1.15 | 1.00 | 2.60 |
| 1.8 | 1.66 | 2.00 | 3.70 |
| 2.7 | 2.1 | 3.00 | 4.60 |
| 3.6 | 2.4 | 4.00 | 5.35 |
| 4.5 | 2.7 | 5.00 | 6.00 |
| 9. | 3.9 | 10.00 | 8.70 |
| 13. | 4.8 | 15.00 | 10.80 |
| 18. | 5.7 | 20.00 | 12.50 |
| 23. | 6.5 | 25.00 | 14.00 |
| 27. | 7.1 | 30.00 | 15.60 |
| 32. | 7.7 | 35.00 | 17.00 |
| 36. | 8.2 | 40.00 | 18.20 |
| 41. | 8.8 | 45.00 | 19.20 |
| 45. | 9.3 | 50.00 | 20.50 |

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| Metric | | English | |
|--------|-------|---------|--------|
| P | E | P | E |
| Mg/hr | kg/hr | T/hr | lbs/hr |
| 90. | 13.4 | 100.00 | 29.50 |
| 140. | 17.0 | 150.00 | 37.00 |
| 180. | 19.4 | 200.00 | 43.00 |
| 230. | 22. | 250.00 | 48.50 |
| 270. | 24. | 300.00 | 53.00 |
| 320. | 26. | 350.00 | 58.00 |
| 360. | 28. | 400.00 | 62.00 |
| 408. | 30.1 | 450.00 | 66.00 |
| 454. | 30.4 | 500.00 | 67.00 |

where:

P = Process weight rate in metric or T/hr, and
 E = Allowable emission rate in kg/hr or lbs/hr.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.322 Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972.

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

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

where:

P = process weight rate; and,
 E = allowable emission rate; and,

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

| | Metric | English |
|---|--------|---------|
| P | Mg/hr | T/hr |
| E | kg/hr | lbs/hr |
| A | 1.985 | 4.10 |
| B | 0.67 | 0.67 |
| C | 0 | 0 |

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

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

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

| | Metric | English | |
|-------|--------|---------|--------|
| P | E | P | E |
| Mg/hr | kg/hr | T/hr | lbs/hr |
| 0.05 | 0.27 | 0.05 | 0.55 |
| 0.1 | 0.42 | 0.10 | 0.87 |
| 0.2 | 0.68 | 0.20 | 1.40 |
| 0.3 | 0.89 | 0.30 | 1.83 |
| 0.4 | 1.07 | 0.40 | 2.22 |
| 0.5 | 1.25 | 0.50 | 2.58 |
| 0.7 | 1.56 | 0.75 | 3.38 |
| 0.9 | 1.85 | 1.00 | 4.10 |
| 1.8 | 2.9 | 2.00 | 6.52 |
| 2.7 | 3.9 | 3.00 | 8.56 |
| 3.6 | 4.7 | 4.00 | 10.40 |
| 4.5 | 5.4 | 5.00 | 12.00 |
| 9. | 8.7 | 10.00 | 19.20 |
| 13. | 11.1 | 15.00 | 25.20 |
| 18. | 13.8 | 20.00 | 30.50 |
| 23. | 16.2 | 25.00 | 35.40 |
| 27.2 | 18.15 | 30.00 | 40.00 |
| 32.0 | 18.8 | 35.00 | 41.30 |
| 36.0 | 19.3 | 40.00 | 42.50 |

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| P | Metric | English | |
|-------|--------|---------|--------|
| | E | P | E |
| Mg/hr | kg/hr | T/hr | lbs/hr |
| 41.0 | 19.8 | 45.00 | 43.60 |
| 45.0 | 20.2 | 50.00 | 44.60 |
| 90.0 | 23.2 | 100.00 | 51.20 |
| 140.0 | 25.3 | 150.00 | 55.40 |
| 180.0 | 26.5 | 200.00 | 58.60 |
| 230.0 | 27.7 | 250.00 | 61.00 |
| 270.0 | 28.5 | 300.00 | 63.10 |
| 320.0 | 29.4 | 350.00 | 64.90 |
| 360.0 | 30.0 | 400.00 | 66.20 |
| 400.0 | 30.6 | 450.00 | 67.70 |
| 454.0 | 31.3 | 500.00 | 69.00 |

where:

P = Process weight rate in Mg/hr or T/hr, and
 E = Allowable emission rate in kg/hr or lbs/hr.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.323 Stock Piles

Sections 212.321 and 212.322 of this Subpart shall not apply to emission units, such as stock piles of particulate matter, to which, because of the disperse nature of such emission units, such rules cannot reasonably be applied.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

**SUBPART Q: STONE, CLAY, GLASS AND CONCRETE
 MANUFACTURING**

**Section 212.421 Portland Cement Processes For Which
 Construction or Modification Commenced On or After
 April 14, 1972**

No person shall cause or allow the emission of smoke or other particulate matter from any portland cement process for which construction or modification commenced on or after April 14, 1972, into the atmosphere having an opacity greater than 10 percent.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

Section 212.422 Portland Cement Manufacturing Processes

Section 212.321 of this Part shall not apply to the kilns and coolers of portland cement manufacturing processes.

- a) The kilns and clinker coolers of portland cement manufacturing processes for which construction commenced prior to April 14, 1972, shall comply with the emission standards and limitations of Section 212.322 of this Part.
- b) The kilns and clinker coolers of portland cement manufacturing processes for which construction or modification commenced on or after April 14, 1972, shall comply with the following emission standards and limitations:
 - 1) No person shall cause or allow the emission of particulate matter into the atmosphere from any such kiln to exceed 0.3 lbs/T of feed to the kiln.
 - 2) No person shall cause or allow the emission of particulate matter into the atmosphere from any such clinker cooler to exceed 0.1 lbs/T of feed to the kiln.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)

10.3.2 35 IAC Part 215, Emission Standards and Limitations for
Organic Material Emissions from Stationary Sources

**SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND
LOADING OPERATIONS**

Section 215.121 Storage Containers

No person shall cause or allow the storage of any volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 K (70 F) or any gaseous organic material in any stationary tank, reservoir or other container of more than 151 cubic meters (40,000 gal) capacity unless such tank, reservoir or other container:

- a) Is a pressure tank capable of withstanding the vapor pressure of such liquid or the pressure of the gas, so as to prevent vapor or gas loss to the atmosphere at all times; or,
- b) Is designed and equipped with one of the following vapor loss control devices:
 - 1) A floating roof which rests on the surface of the volatile organic liquid and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the volatile organic liquid has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3 K (70 F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.
 - 2) A vapor recovery system consisting of:
 - A) A vapor gathering system capable of collecting 85% or more of the uncontrolled volatile organic material that would be otherwise emitted to the atmosphere; and,
 - B) A vapor disposal system capable of processing such volatile organic material so as to prevent its emission to the atmosphere. No person shall cause or allow the emission of air contaminants

into the atmosphere from any gauging or sampling devices attached to such tank, reservoir or other container except during sampling.

- 3) Other equipment or means of equal efficiency approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.122 Loading Operations

- a) No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading facility having through-put of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading facility is equipped with submerged loading pipes, submerged fill, or a device that is equally effective in controlling emissions and is approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.
- b) No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in Section 215.121(a) or is fitted with a recovery system as described in Section 215.121(b)(2).
- c) Exception: If no odor nuisance exists the limitations of this Section shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

(Source: Amended at 14 Ill. Reg. 9173, effective May 23, 1990)

Section 215.123 Petroleum Liquid Storage Tanks

- a) The requirements of subsection (b) below shall not apply to any stationary storage tank:
- 1) Equipped before January 1, 1979 with one of the vapor loss control devices specified in Section 215.121(b) of this Part, except Section 215.121(b)(1) of this Part;
 - 2) With a capacity of less than 151.42 cubic meters;
 - 3) With a capacity of less than 1,600 cubic meters (422,400 gallons) and used to store produced crude oil and condensate prior to custody transfer;
 - 4) With a capacity of less than 1,430 cubic meters (378,000 gallons) and used to store produced oil or condensate in crude oil gathering;
 - 5) Subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR 60, incorporated by reference in Section 215.105 of this Part. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance for new stationary sources...are applicable in this State and are enforceable under [The Environmental Protection Act].* (Ill. Rev. Stat., ch. 111 1/2, par. 1009.1(b)).
 - 6) In which volatile petroleum liquid is not stored; or
 - 7) Which is a pressure tank as described in Section 215.121(a) of this Part.
- b) Subject to subsection (a) above no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
- 1) The tank is equipped with one of the vapor loss control devices specified in Section 215.121(b) of this Part;

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- 2) There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;
 - 3) All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:
 - A) The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;
 - B) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
 - C) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;
 - 4) Routine inspections of floating roof seals are conducted through roof hatches once every six months;
 - 5) A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and
 - 6) A record of the results of each inspection conducted under subsection (b)(4) or (b)(5) above is maintained.
- c) Owners and operators of petroleum liquid storage tanks were required to have compliance schedules as summarized in Appendix C of this Part.

(Source: Amended at 16 Ill. Reg. 13849, effective August 24, 1992)

Section 215.124 External Floating Roofs

- a) In addition to meeting the requirements of Section 215.123(b), no owner or operator of a stationary storage tank equipped with an external floating roof shall cause or allow the storage of any volatile petroleum liquid in the tank unless:
- 1) The tank has been fitted with a continuous secondary seal extending from the floating roof to the tank wall (rim mounted secondary seal) or any other device which controls volatile organic material emissions with an effectiveness equal to or greater than a rimmounted secondary seal;
 - 2) Each seal closure device meets the following requirements:
 - A) The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall; and
 - B) The accumulated area of gaps exceeding 0.32 centimeter (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of tank diameter (1.0 square inches per foot of tank diameter).
 - 3) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening;
 - 4) Openings are equipped with projections into the tank which remain below the liquid surface at all times;
 - 5) Inspections are conducted prior to May 1 of each year to insure compliance with subsection (a);
 - 6) The secondary seal gap is measured prior to May 1 of each year;

- 7) Records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, the results of the inspections and the results of the secondary seal gap measurements are maintained and available to the Agency, upon verbal or written request, at any reasonable time for a minimum of two years after the date on which the record was made.
- b) Subsection (a) does not apply to any stationary storage tank equipped with an external floating roof:
- 1) Exempted under Section 215.123(a)(2) through 215.123(a)(6);
 - 2) Of welded construction equipped with a metallic-type shoe seal having a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal);
 - 3) Of welded construction equipped with a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled-type seal, or other closure device of equivalent control efficiency approved by the Agency in which a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia) at 294.3 K (70 F) is stored; or
 - 4) Used to store crude oil.

(Source: Amended at 14 Ill. Reg. 9173, effective May 23, 1990)

Section 215.125 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Sections 215.123 or 215.124 shall comply with its standards and limitations by December 31, 1983.
- b) If an emission source is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Sections 215.123 and 215.124 no later than December 31, 1987:

| | |
|--------|-------------|
| Cook | Macoupin |
| DuPage | Madison |
| Kane | Monroe |
| Lake | Saint Clair |

(BOARD NOTE: These counties are proposed to be designated as nonattainment by the United States Environmental Protection Agency at 47 Fed. Reg. 31588, July 21, 1982).

- c) Notwithstanding subsection (b), if any county is designated as nonattainment by the United States Environmental Protection Agency (USEPA) at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.123 and 215.124 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.126 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.125(a) shall submit to the Agency a compliance plan as required by 35 Ill. Adm. Code 201.241, including a project completion schedule where applicable, no later than April 21, 1983.
- b) The owner or operator of an emission source subject to Section 215.125(b) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.
- c) The owner or operator of an emission source subject to Section 215.125(c) shall submit a compliance plan, including a project completion schedule within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- d) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to the rules

specified in subsections (a), (b) or (c) may operate the emission source according to the plan and schedule as submitted.

- e) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201.241 including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.127 Emissions Testing

- a) Any tests of organic material emissions, including tests conducted to determine control equipment efficiency, shall be conducted in accordance with the methods and procedures specified in Section 215.102.
- b) Upon a reasonable request by the Agency, the owner or operator of an organic material emission source required to comply with this Subpart shall conduct emissions testing, at such person's own expense, to demonstrate compliance.
- c) A person planning to conduct an organic material emission test to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so the Agency may observe the test.

(Source: Added at 14 Ill. Reg. 9173, effective May 23, 1990)

Section 215.128 Measurement of Seal Gaps

- a) Any measurements of secondary seal gaps shall be conducted in accordance with the methods and procedures specified in 40 CFR 60, Subpart Kb incorporated by reference in Section 215.105.
- b) A person planning to conduct a measurement of seal gaps to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned performance of the tests so the Agency may observe the test.

(Source: Added at 14 Ill. Reg. 9173, effective May 23, 1990)

SUBPART K: USE OF ORGANIC MATERIAL

Section 215.301 Use of Organic Material

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.302 Alternative Standard

Emissions of organic material in excess of those permitted by Section 215.301 are allowable if such emissions are controlled by one of the following methods:

- a) Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; or,
- b) A vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; or,
- c) Any other air pollution control equipment approved by the Agency capable of reducing by 85 percent or more the uncontrolled organic material that would be otherwise emitted to the atmosphere.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective July 28, 1979)

Section 215.303 Fuel Combustion Emission Sources

The provisions of Sections 215.301 and 215.302 shall not apply to fuel combustion emission sources.

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(Source: Amended at 3 Ill. Reg. 30, p. 124, effective
July 28, 1979)

Section 215.304 Operations with Compliance Program

The provisions of Section 215.301 and 215.302 shall not apply to any owner, operator, user or manufacturer of paint, varnish, lacquer, coatings or printing ink whose compliance program and project completion schedule, as required by 35 Ill. Adm. Code 201, provides for the reduction of organic material used in such process to 20 percent or less of total volume by May 30, 1975.

(Source: Amended at 3 Ill. Reg. 30, p. 124, effective
July 28, 1979)

Section 215.305 Viscose Exemption (Repealed)

(Source: Repealed at 9 Ill. Reg. 13960, effective
August 28, 1985)

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10.4 Attachment 4- State Construction and Operating Permits

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217/782-2113

OPERATING PERMIT-NSPS SOURCE

PERMITTEE

Dixon-Marquette Cement
Attn: Tim Knisley
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 72120834
Applicant's Designation: DIXONPLANT
Subject: Cement Manufacturing Facility
Date Issued: April 30, 1996
Location: 1914 White Oak Lane, Dixon

I.D. No.: 103806AAC
Date Received: February 2, 1996
Expiration Date: May 6, 1997

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of an aggregate crushing plant with dust collectors and wet suppression as back-up, an aggregate classifying plant, 3 clinker conveyors, 4 kiln feed tanks, 1 screw conveyor, 3 homogenizing silos, 4 kiln weight feeders, 1 rod mill, 1 air separator, 4 ball/finish mills and separators, 1 clinker elevator and conveyor, 2 regrind mills, 1 colored masonry material tank, 1 colored masonry material hopper/blender/packager, 6 packing machines, 1 bulk cement loading tank system, 14 cement silos, 4 mortar silos, 4 regrind silos, and 2 bulk RR car and truck loading systems all with baghouses, 4 clinker coolers with settling chamber and gravel filters, 1 apron feeder/crusher and 2 vibrating screens with water sprays, 2 air separators and elevator with cyclones and baghouses, 3 air furnaces, 1 standby kiln with multiclone and baghouse, 3 kilns and preheaters with ESP and baghouse, and 2 cement storage silos with 4 dust collectors (49A, 49B, 50A, 50B) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. The two new cement storage silos with four dust collectors (49A, 49B, 50A, 50B) is subject to New Source Performance Standard (NSPS) for Portland Cement Plants, 40 CFR 60, Subparts A and F adopted as 35 Ill. Adm. Code 230. The Illinois EPA is administering NSPS 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 the two storage silos, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- 2a. The crushing plant and aggregate classifying plant are subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and 000.

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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. 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)).
- 3a. 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)).
- 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.
- 4a. Operation of the aggregate crushing plant with dust collectors (and wet suppression) shall not exceed the following limits:

| Item I.D. | Description | Max. TPH | Annual Emission | | |
|--------------|----------------------------|-------------|------------------------|----------------|-----------------------|
| | | | Max. Tons Processed | Rate Lb/Ton | Emission Lb/Annual |
| A | Truck Dump | 850 | 900,000 | 0.0003 | 270 |
| B/C1 | Apron Feeder/Dribble Conv. | 850 | 900,000 | 0.0003 | 270 |
| C | Primary Crusher | 850 | 900,000 | 0.0028 | 2,520 |
| C2 | Collector Conveyor | 850 | 900,000 | 0.00003 | 27 |
| C3 | Transfer Conveyor | 850 | 900,000 | 0.00003 | 27 |
| E | Apron Feeder (under Bin) | 850 | 900,000 | 0.00003 | 270 |
| C4 | Transfer Conveyor | 1,349 | 1,428,353 | 0.00003 | 43 |
| F | Screen | 674.5 | 714,176 | 0.0016 | 1,143 |
| G | Screen | 674.5 | 714,176 | 0.00003 | 1,143 |
| C5 | Conveyor Collector-Coarse | 249 | 263,647 | 0.00003 | 8 |
| C6 | Conveyor Collector-Medium | 250 | 264,706 | 0.00003 | 8 |
| C7 | Transfer Conveyor | 499 | 528,353 | 0.00003 | 16 |
| H | Secondary Crusher | 499 | 528,353 | 0.0028 | 1,479 |
| C8 | Transfer Conveyor | 499 | 528,353 | 0.00003 | 16 |
| C9 | Conveyor Collector 3/4 | 425 | 450,000 | 0.0003 | 135 |
| C10 | Conveyor Collector 3/4 | 425 | 450,000 | 0.0003 | 135 |
| FC9 | Transfer Conveyor | 850 | 900,000 | 0.0003 | 270 |
| | Sub Total - Plant Equip. | | | | 7,780 |
| 1 | Primary Dust Collector | 850 | 900,000 | 0.00115966 | 1,044 |
| 2 | Secondary Dust Collector | 850 | 900,000 | 0.0068067 | 6,127 |

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| | | | | | |
|-------------|---------------------------------------|-----|---------|------------|--------------|
| 3 | Screen Dust Collector | 850 | 900,000 | 0.0020167 | <u>1,815</u> |
| | Sub Total - Collectors | | | | 8,986 |
| 1FC8 FC1 | 7 Field Conveyors - To Cement Plt. | 850 | 900,000 | 0.0003 ea. | 1,890 |

Total (7780 + 8986 + 1890) = 18656#/(2000 #/ton) = 9.3 ton Annual

- b. Operation of the aggregate classifying plant shall not exceed the following limits:

| Item | | Max. | Annual | Emission | |
|-------------|-------------------------------------|------------|------------------|---------------|------------------|
| <u>I.D.</u> | <u>Description</u> | <u>TPH</u> | <u>Max. Tons</u> | <u>Rate</u> | <u>Emission</u> |
| | | | <u>Processed</u> | <u>Lb/Ton</u> | <u>Lb/Annual</u> |
| P1 | Loader Dump | 375 | 600,000 | .0056 | 3,360 |
| P1 | Hopper Discharge Feeder | 375 | 600,000 | .0003 | 180 |
| P1 | Feed Conveyor to Screen | 375 | 600,000 | .0003 | 180 |
| P1 | Screen | 375 | 600,000 | .016 | 9,600 |
| P2 | Oversize Conveyor to Stockpile | 19 | 30,400 | .0003 | 9 |
| P3 | Fines Transfer Conv. | 131 | 209,600 | .0003 | 67 |
| P4 | Fines Stacker to Stockpile | 131 | 209,600 | .013 | 2,725 |
| P5 | Coarse Transfer Conveyor | 225 | 360,000 | .0003 | 108 |
| P6 | Coarse Stacker | 11 | 17,600 | .013 | 229 |
| | Transfer | 214 | 342,400 | .0003 | 103 |
| P7 | Transfer to P8 | 214 | 342,400 | .0003 | 103 |
| | Conveyor to Screen | 214 | 342,400 | .0003 | 103 |
| | Screen | 214 | 342,400 | .016 | 5,478 |
| P9 | Transfer Conveyor - Fines | 19 | 30,400 | .0003 | 9 |
| P10 | Fines Stacker Conveyor | 19 | 30,400 | .0003 | 9 |
| P11 | Chips Transfer Conveyor | 77 | 123,200 | .0003 | 37 |
| P12 | Chips Stacker Conveyor | 77 | 123,200 | .013 | 1,602 |
| P13 | Concrete Stone Transfer Conveyor | 118 | 188,800 | .0003 | 57 |
| P14 | Concrete Stone Stacker Conveyor | 118 | 188,800 | .013 | <u>2,454</u> |
| | | | | | 26,413 |

Annual Emission Rate - Processing (26413#/2000#/ton) = 13.2 ton

- c. i. The moisture content of the aggregate as crushed shall be at least 1.5% by weight so as to reduce emissions of particulate matter. Compliance with this requirement may be presumed if moisture content of aggregate as shipped is at least 1.5%.
- ii. The moisture content of a representative sample of the aggregate shall be measured at least once per week using ASTM Procedures (C566-67) for total moisture content of material.

- 5a. The Permittee shall maintain records of all moisture content tests performed, pursuant to Condition 4(c), including date, time, individual performing test, location of sample e.g., prior to crushing or as shipped.
- b. The Permittee shall maintain an operating log for the crushing plant, including dates and times of usage and dates and times of the inspection performed pursuant to Condition 4(c), with person performing inspection observation(s) and measures taken to correct any deficiencies.
- c. The Permittee shall maintain monthly records of the following items:
 - i. Crushing plant input feed rate (tons/month and tons/year).
6. The records required by Conditions 5 shall be kept at a readily accessible location at the plant for at least 3 years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request.
7. If the moisture content of the material being crushed is less than 1.5%, the crushing plant control system is not operating properly, or there is an exceedance of this permit as determined by the records required by Condition 5 the Permittee shall submit a quarterly report to the Agency's Compliance Monitoring Section in Springfield, Illinois within 30 days after the end of the quarter. The report shall include the emissions on an hourly basis, a copy of relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
8. Any required reports and notifications concerning equipment operation, testing or a continuous monitoring system shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614
9. 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.
10. This Permit will expire on the day operation ceases at this location if this plant is moved to a new location, or otherwise on the date specified above.

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11. The Agency is to be notified, in writing, within five (5) days of any relocation of the moveable processing equipment, covered by this permit, to another permitted location.
12. The transportation and reassembly of a portable plant at a new location requires a new construction and operating permit pursuant to 35 Ill. Adm. Code 201.142. This permit must be obtained prior to reassembling the plant at the new location. Application forms are enclosed. The Agency will issue a joint construction and operating permit if the information provided in the application forms demonstrates compliance with the Board's Regulations.
13. The crushing and screening equipment covered under this permit may only operate when the specific equipment covered in permit 72120834 listed as the apron feeder and jaw crusher, the impactor secondary crusher and "2" vibrating screens is not operating, i.e., concurrent operation of the noted equipment in these two permits is not allowed.
14. Emissions of particulate matter from both storage silos with dust collectors (49A, 49B, 50A, 50B) shall not exceed 3.5 tons/year. This limit is based on the emissions given (0.35 lb/hr per dust collector) with maximum hours of operation (4992 hours/year).

Please note that this permit has been revised to include the operation of the aggregate crushing plant with dust collectors and wet suppression (as back up) and an aggregate classifying plant from construction permit 93090041.

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

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

DES:RPS:jar

cc: Region 2

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
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217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Dixon-Marquette Cement, Inc.
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 99060053
Applicant's Designation: DIESELFUEL
Subject: Receiving and Transfer
Date Issued: September 30, 1999
Location: 1914 White Oak Lane, Dixon

I.D. No.: 103806AAC
Date Received: June 3, 1999

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a modification to the existing secondary crushing operations which consists of removing the secondary crusher and secondary vibrating screens and using the existing housing for receiving and transfer of materials 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 modification to the secondary crushing operation, without any increase in emissions of particulate matter into the atmosphere.
2. Operation of the equipment being constructed and/or modified is allowed under this permit until final action is taken on the Clean Air Act Permit Program (CAAPP) application for this source, provided that such CAAPP application has been received and been deemed complete by the Illinois EPA. As a result, the Permittee must still update the CAAPP application to include the aforementioned equipment but is not required to submit an application for a state operating permit in the interim.

It should be noted that this permit is issued for the construction of the equipment listed above. The Permittee should update their CAAPP application to include this new equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information to accomplish this.

It should also be noted that the #2 diesel fuel storage tanks are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(n)(3).

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

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

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

DES:JMS:jar

cc: Region 2

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
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217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement, Inc.
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 99060085
Applicant's Designation: DIESELFUEL
Subject: Diesel Fuel Storage Tank
Date Issued: July 6, 1999

I.D. No.: 103806AAC
Date Received: June 28, 1999
Operating Permit Expiration
Date: July 6, 2004

Location: 1914 White Oak Lane, Dixon

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 15,000 gallon #2 diesel fuel storage tank 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.
- 2a. The one 15,000 gallon #2 diesel fuel storage tank(s) is subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart Kb. 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, to the extent practicable, maintain and operate these tanks, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the New Source Performance Standard.
- c. The Permittee shall fulfill the monitoring of operations requirements of the New Source Performance Standards, 40 CFR 60.116b(a) and (b) for the one 15,000 gallon #2 diesel fuel storage tank. That is, records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel, shall be maintained and readily accessible for the life of the source.
3. This permit is issued based on negligible emissions of volatile organic material from one 15,000 gallon #2 diesel fuel storage tank. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

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Dixon-Marquette Cement, Inc.
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If you have any questions on this, please call Jason Schnepf at 217/782-2113.

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

DES:JMS:jar

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PERMIT NOT REQUIRED

July 7, 1999

Dixon-Marquette Cement, Inc.
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 99060085
I.D. No.: 103806AAC
Applicant's Designation: DIESELFUEL
Received: June 28, 1999
Construction/Operation of: Diesel Fuel Storage Tank
Location: 1914 White Oak Lane, Dixon

A review of the permit application referenced above for CONSTRUCTION and OPERATION of the one 15,000 gallon #2 diesel fuel storage tank indicates that this project does not require a permit pursuant to 35 Ill. Adm. Code 201.146(n)(3). This determination is based upon the information submitted to the Illinois EPA at this time.

It should be noted that the Permittee may need to update the pending CAAPP application to include the above mentioned emission unit.

If you have any questions or need any assistance regarding this matter, please contact Jason Schnepf at 217/782-2113.

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

DES:JMS:psj

cc: Region 2

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Dixon-Marquette Cement, Inc.
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JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement, Inc.
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 99070078 I.D. No.: 103806AAC
Applicant's Designation: HOPPER/CONVEYOR Date Received: July 27, 1999
Subject: Hopper/Conveyor
Date Issued: August 17, 1999 Expiration Date: August 17, 2004
Location: 1914 White Oak Lane, Dixon

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of a hopper and a conveyor 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.
- 2a. This permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
3. The throughput of the above-referenced equipment shall not exceed 26,000 cubic yards (52,000 tons) per month and 104,000 cubic yards (208,000 tons) per year.
4. Particulate matter emissions shall not exceed the following limits:

| <u>Process</u> | <u>Particulate Matter Emissions</u> | |
|---------------------|-------------------------------------|------------------|
| | <u>(Tons/Mo)</u> | <u>(Tons/Yr)</u> |
| Hopper and Conveyor | .4 | .15 |

These limits are based on information provided in the permit application and standard AP-42 emission factors. Compliance shall be determined from a running total of 12 months of data.

5. 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.
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.
7. 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. Monthly and yearly limestone, sand, and clay throughput (tons/month, tons/year).
8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
9. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
10. 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)
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:

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Dixon-Marquette Cement, Inc.
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Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

11. This permit is issued based on the fact that the above-specified units are identified in the Permittee's pending application for a CAAPP permit and are certified, by Permittee, to be in compliance with applicable regulations.
12. This permit does not preclude any future permitting review and evaluation nor does it shield the Permittee from any legal action for noncompliance with or circumvention of, applicable regulations.

It should be noted that a detailed review of the specified units will be performed during the review of the pending CAAPP application submitted for these units.

If you have any questions on this permit, please contact Randy Solomon at 217/782-2113.

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

DES:RBS:jar

cc: Region 2

- a. Cement production (tons/mo, tons/yr).
6. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
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)
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
9. This permit is issued based on the fact that the above-specified units are identified in the Permittee's pending application for a CAAPP permit and are certified, by Permittee, to be in compliance with applicable regulations.
10. This permit does not preclude any future permitting review and evaluation nor does it shield the Permittee from any legal action for noncompliance with or circumvention of, applicable regulations.

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It should be noted that a detailed review of the specified units will be performed during the review of the pending CAAPP application submitted for these units.

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

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

DES:RBS:jar

cc: Region 2

- 2a. This permit is issued based on the new secondary crusher not causing or contributing to an increase in emissions from existing operations at the plant.
 - b.
 - i. The new secondary crusher shall not be used for the production of feed to the Portland Cement Plant, but shall only be used for production of crushed stone, e.g., construction aggregate.
 - ii. Annual throughput of the new secondary crusher shall not exceed 1,680,000 tons of stone per year.
 - c. Annual throughput of the engine generator associated with the new crusher shall not exceed 42,168 gallons of oil per year.
 - d. Compliance with these annual limits shall be determined from a running total of 12 months of throughput data.
- 3a.
 - i. The Permittee shall operate and maintain the new secondary crusher and associated conveying and screening to minimize emissions of particulate matter.
 - ii. Annual emissions of PM₁₀ from the new secondary crusher and associated conveying and screening shall not exceed 10.25 tons/year. This limit is set based on an annual throughput of 1,680,000 tons/year and appropriate emission factors from USEPA's Compilation of Emission Factors, AP-42, i.e., 0.0024, 0.0014, and 0.0070 lb PM₁₀/ton for crushing, conveying, and screening, respectively.
 - b. Annual emissions of nitrogen oxides (NO_x), carbon monoxide (CO), and PM₁₀ from the engine generator shall not exceed 13.0, 2.8, and 0.91 tons. These limits reflect maximum emissions of this unit as stated in the application based on maximum operation and applicable emission factors from USEPA's Compilation of Emission Factors, AP-42, i.e., 4.41 and 0.95 lb/mmBtu for NO_x and CO, respectively.
 - c. Compliance with these limits shall be determined from a running total of 12 months of emission data.
4. 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
- 5a. These units may be operated for 180 days under the Construction Permit. This condition supersedes Standard Condition 1.

- b. Following completion of the emission testing required by Condition 6, which testing shows compliance with applicable requirements the Permittee may continue operation of these units under the Operating Permit.
- 6a. 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 emissions. 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. The methods and procedures specified by 40 CFR 60.675 shall be used for these measurements.
 - c. The Illinois EPA shall be notified prior to these measurements to enable the Illinois EPA to observe these measurements. Initial notification of the expected date of the measurements shall be submitted to a minimum of thirty days prior to the expected date as required by 40 CFR 60.8(d). Notification of the actual date and expected time of measurement shall be submitted a minimum of five 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.
 - d. A report for these measurements shall be promptly submitted to the Illinois EPA within 30 days after test results are compiled or 90 days after the date of measurements, whichever occurs earlier.
- 7a. The Permittee shall keep the following operating records:
 - i. Throughput of the new secondary crusher with supporting data. For example, if production records are kept for the primary crusher, the Permittee shall keep supporting data for its estimate of the fraction of material that then passes through the new secondary crusher.
 - ii. Consumption of fuel by the engine associated with the new crusher.
- b. The Permittee shall keep an operating maintenance log for the new secondary crusher and associated equipment that addresses aspects of this equipment related to air pollution control.
- 8. The Permittee shall promptly notify the Illinois EPA of any exceedance of the requirements of Conditions 1, 2, or 3. This report shall

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describe the nature of the exceedance, the date, the corrective actions taken, and the actions taken to prevent similar exceedances in the future.

- 9a. Two copies of required reports and notifications concerning equipment operation, performance testing, or exceedances shall be sent to:

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

- b. and one copy of required reports and notifications shall also 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

If you have any questions on this permit, please call Christopher Romaine at 217/782-2113.

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

DES:CRR:jar

cc: Illinois EPA, FOS Region 2
USEPA

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JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement Company
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 00120074

I.D. No.: 103806AAC

Applicant's Designation: CLINKERBAK

Date Received: December 29, 2000

Subject: Baghouse for Clinker Transfer Station

Date Issued: March 16, 2001

Operating Permit Expiration

Date: March 16, 2006

Location: 1914 White Oak Lane, Dixon

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 baghouse replacing existing baghouse to control existing clinker transfer station as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. The clinker transfer station shall be controlled by either the existing or the new baghouse and shall not operate without a control while the new baghouse is being installed.
2. This permit is issued based upon replacement of baghouse for clinker transfer station without any increase in emissions of particulate matter to the atmosphere. The existing equipment is covered by a separate operating permit, 95020058.

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

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
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JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement, Inc.
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

| | |
|---|--|
| <u>Application No.:</u> 01010061 | <u>I.D. No.:</u> 103806AAC |
| <u>Applicant's Designation:</u> BAGFILTER | <u>Date Received:</u> January 25, 2001 |
| <u>Subject:</u> Replacement Bag Filter at the Loadout Station L-1 | |
| <u>Date Issued:</u> February 8, 2001 | <u>Operating Permit Expiration</u> |
| | <u>Date:</u> February 8, 2006 |

Location: 1914 White Oak Lane, Lee, Dixon

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of bag filter at Loadout L-1 (East) 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. This permit is issued based on construction and operation of the bag filter at Loadout L-1 (East), without any increase in emission of particulate matter into the atmosphere.

Please note that the Permittee should update their CAAPP application to include this equipment by submitting form 505-CAAPP - "Supplement to CAAPP Application" along with all other appropriate information.

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

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

DES:RNG:jar

cc: Region 2

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement Company
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 01080008
Applicant's Designation:
Subject: Pug Mill/Truck Dump/Riprap Grate
Date Issued: November 1, 2001

I.D. No.: 103806AAC
Date Received: August 6, 2001

Operating Permit Expiration
Date: November 1, 2006

Location: 1914 White Oak Lane, Dixon

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of rip-rap process and pug mill process (including loading hopper, two conveyors and pug mill utilizing water injection, and three rotary mixers) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. Particulate matter (PM) emissions from the rip-rap process shall not exceed 1.5 lb/hour and 0.75 tons/year. These limits are based on the process weight rate (100 tons/hour), standard emission factor (0.015 lb/ton), and operation (1,000 hours/year) as 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 on negligible emissions of particulate matter from the pug mill process. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 3a. The Permittee shall maintain the following records:
 - i. Throughput of rip-rap and pug mill process; and
 - ii. PM emissions from riprap and pug mill processes using standard emission factors.
- b. These records shall be maintained for at least three years and be made available to the Illinois EPA for inspection or copying upon request.

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

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

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement, Inc.
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 01090004
Applicant's Designation:
Subject: Fly Ash Storage Handling System
Date Issued: September 28, 2001

I.D. No.: 103806AAC
Date Received: September 6, 2001

Operating Permit Expiration
Date: September 28, 2006

Location: 1914 White Oak Lane, Dixon

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of two fly ash storage handling systems and bag filter control 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. This permit is issued based on negligible emissions of particulate matter from two fly ash storage handling systems. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
3. At all times, the Permittee shall also, to the extent practicable, maintain and operate the two fly ash storage handling systems, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

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 1

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement Company
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 01090035

I.D. No.: 103806AAC

Applicant's Designation: BagFilter at Loadout L-2, L-3 & L-4

Subject: Three Replacement BagFilters

Date Received: September 21, 2001

Date Issued: October 19, 2001

Operating Permit Expiration Date:
October 19, 2006

Location: 1914 White Oak Lane, Dixon

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of three replacement bagfilters for the existing bulk cement loadout stations 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 construction of the replacement bag filters, without any increase in emissions of regulated air pollutants into the atmosphere.
2. The Permittee may operate the existing bulk cement loadout stations with the new bagfilters under this permit until its CAAPP permit is issued.

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

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

DES:KKD:psj

cc: Region 2
CAAPP Application No. 95090025

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Dixon-Marquette Cement Company
Attn: Neil DeRynck
1914 White Oak Lane
Dixon, Illinois 61021

Application No.: 02060060

I.D. No.: 103806AAC

Applicant's Designation:

Date Received: June 21, 2002

Subject: Bagfilter at CCG Conveyor Belt Transfer

Date Issued: June 28, 2002

Operating Permit Expiration

Date: June 28, 2007

Location: 1914 White Oak Lane, Dixon

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of a bagfilter to control particulate matter emissions from existing clinker-coal-gypsum conveyor transfer station 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 construction and operation of the bagfilter without any increase in emissions of particulate matter into the atmosphere.

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

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

DES:JMS:psj

cc: Region 2

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

10.5 Attachment 5 - 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: _____

10.6 Attachment 6 - 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).

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

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

| | |
|---|---------------------------|
| Application For Construction Permit (For CAAPP Sources Only) | For Illinois EPA use only |
| | 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.

| Source Information | | |
|--|--------------|--|
| 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. I.D. number: |

| Owner Information | | |
|-------------------|------------|---------------|
| 9. Name: | | |
| 10. Address: | | |
| 11. City: | 12. State: | 13. Zip code: |

| Operator Information (if different from owner) | | |
|--|------------|---------------|
| 14. Name | | |
| 15. Address: | | |
| 16. City: | 17. State: | 18. Zip code: |

| Applicant Information | |
|---|--|
| 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.

10.8 Attachment 8 - 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.

FINAL DRAFT/PROPOSED CAAPP PERMIT
Dixon-Marquette Cement, Inc.
I.D. No.: 103806AAC
Application No.: 95090025
September 6, 2002

Mail renewal applications to:

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

MJP:psj

Project Summary

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

The important steps in the production of Portland cement are as follows:

- Raw material processing (crushing and screening);
- Raw material preparation (proportioning and grinding);
- Raw material mixing and blending to create kiln feed;
- Pyroprocessing of the kiln feed to form Portland cement clinkers;
- Clinker cooling and storage;
- Finish milling (grinding clinker to form Portland cement); and
- Packaging and shipment of Portland cement.

Raw materials, consisting mainly of limestone, are trucked to a designed crushing facility, near the quarry, where the material undergoes both a primary and secondary crushing operation. After achieving the desired size, the material is moved through a series of conveyors to the raw milling process where it is dried, ground, proportioned, and prepared for pyroprocessing. Depending on market conditions, not all raw material undergoes the raw milling process but instead is either sold as construction aggregates or conveyed to storage piles.

Prior to raw milling, the material is mixed with clay and sand. During raw milling the mixture is ground to the appropriate size for pyroprocessing. This homogeneous mixture is referred to as kiln feed.

The prepared kiln feed is fed to one of four pyroprocessing systems; each including a rotary kiln. Three of the four also utilize preheater to enhance thermal efficiency.

The rotary kiln is the heart of the Portland cement process since the chemical reactions necessary to produce Portland cement take place here. The rotary kiln is a slightly inclined, slowly rotating steel tube that is lined with refractory material. The rotation of the kiln causes the solid materials to be slowly transported downhill from the feed end. Fuel (a mixture of coal and coke) is supplied at the lower or discharge end. The hot, gaseous combustion products move countercurrent to the material flow, thereby transferring heat to the solids in the kiln.

The product of the rotary kiln is somewhat glassy and spherical mass known as clinker. After cooling, the clinker is either stored for future use or mixed with gypsum and a grinding aid and ground in the finish mill to produce Portland cement.

The Portland cement is then conveyed to storage silos where it will remain until either shipped in bulk or packaged and shipped in paper bags. Shipping methods include truck and rail.

II. EMISSION UNITS

Significant emission units at this source are as follows:

| Emission Unit | Plant emission unit | Description |
|--|---|--------------------------------|
| 01 | Crushing plant | Truck dump (TD-2) |
| | | Apron conveyor feeder (13-003) |
| | | Primary crusher (13-005) |
| | | Apron feeder (13-006) |
| | | Conveyor belt (13-007) |
| | | Secondary crusher (13-008) |
| | | Conveyor belt (13-009) |
| | | Vibrating screen (13-010) |
| | | Vibrating screen (13-011) |
| | | Conveyor belt (13-016) |
| | | Conveyor belt (13-017) |
| | | Conveyor belt (13-012) |
| | | Truck dump (TD-1) |
| | | Apron conveyor feeder (C1) |
| | | Primary crusher (C) |
| | | Conveyor belts (3,4,7) |
| | | Secondary crusher (H) |
| | | Three deck screens (F,G) |
| | | Conveyor belts (5,6,9,10) |
| | | 02 |
| Air separator #1 (21-036) | | |
| Air separator #2 (21-136) | | |
| Raw mill #2 & air furnace 1 unit (7.3 mmBtu/hr) (21-139) | | |
| Feed/recirculating elevator #2 (21-133) | | |
| Raw mill #2 & air furnace 2 units (14 mmBtu/hr) (21-040) | | |
| Homogenizing & kiln feed distribution | Homogenization silos #1 & #2 (HS-1, HS-2) | |
| | Homogenization silos #3 (HS-3) | |
| | Bucket elevator #1, #2 (21-225 & 21-226) | |
| | Kiln feeder #1 (21-230) | |
| | Kiln feeder #2 (21-232) | |
| | Kiln feeder #3 (21-234) | |
| Regrind mill | Regrind mill #1 (41-412) | |
| | Regrind mill separator #1 (41-416) | |
| | Crushed stone silo (CSS-1) | |
| | Cement silo (CS-1) | |

| Emission Unit | Plant emission unit | Description | |
|---------------|--|------------------------------------|---|
| 02 (Cont.) | Regrind mill (Continued) | Regrind mill #2 (41-435) | |
| | | Regrind mill separator #2 (41-439) | |
| | | Crushed stone silo (CSS-2) | |
| | | Cement silo (CS-2) | |
| | Cement silos | | Large cement silos #1-#6 and Small cement silos #7-#14 (CS-3) |
| | | | Masonry silos #15-#18 (MS) |
| | | | Bulk loading tank (West) |
| | | | Old bulk loading silo (BLS-1) |
| | | | Old bulk loading silo (BLS-2) |
| | | | New bulk loading silo (BLS-3) |
| | | | New bulk loading silo (BLS-4) |
| | | | Old truck/rail loadout-east ((L-1) |
| | | | Old truck/rail loadout-west ((L-2) |
| | | | New truck/rail loadout-east ((L-3) |
| | | | New truck/rail loadout-west ((L-4) |
| | | | Cement pump (81-014) |
| | | | Side spouts on silo (11) (SS-1) |
| | | | Cement and colored mortar packing |
| | Packer feeder & packing machine #3 (81-150 ,151) | | |
| | Bucket elevator #4 (81-161) | | |
| | Packer feeder & packing machine #4 (81-158 ,159) | | |
| | Bucket elevator #5 (81-168) | | |
| | Packer feeder & packing machine #5 (81-165 ,166) | | |
| | Bucket elevator #6 (81-175) | | |
| | Packer feeder & packing machine #6 (81-172 ,173) | | |
| | Bucket elevator #7 (81-182) | | |
| | Packer feeder & packing machine #7(81-179 ,180) | | |
| | Bucket elevator #2(81-189) | | |
| | Packer feeder & packing machine #8 (81-186 ,187) | | |
| | Colored mortar silo (CMS-1) | | |
| | Hopper Blender/Packer #1 (PM-1) | | |
| | Hopper Blender/Packer #2 (PM-2) | | |
| | Clinker handling | | Clinker elevator #4 West (32-314) |
| | | | Clinker elevator #4 East (32-313) |
| | | | Clinker belt #4 (32-316) |
| | | | Clinker elevator (CE-1) |
| | | | Clinker transfer belt (32-140) |
| | | | Clinker transfer belt (32-141) |
| | | | Clinker reclaim hopper (32-536) |
| | | | Vibrator feeder (32-537) |
| | 02 (Cont.) | Clinker handling (Continued) | Transfer belt (32-538) |

| Emission Unit | Plant emission unit | Description |
|---------------|--|--|
| | | Transfer belt (32-539) |
| | | Conveyor belt (32-503) |
| | | Conveyor belt (32-504) |
| | | Vibrator feeder (32-502) |
| | | Coal hopper (32-501) |
| | Clinker cooler | Clinker cooler #1 (32-015) |
| | | Clinker cooler #2 (32-118) |
| | | Clinker cooler #3 (32-131) |
| | | Clinker cooler #4 (32-302) |
| | Finish mills | Finish mill #1 (41-220) with separator #1 (41-023) |
| | | Finish mill #2 (41-073) with separator #2 (41-086) |
| | | Finish mill #3 (41-204) with separator #3 (41-220) |
| | | Finish mill #4 (41-313) with separator #4 (41-338) |
| | | Rod mill (41-307) |
| | | Bucket elevator (41-309) |
| | | Kilns |
| | Rotary kiln #2 with preheater (32-113) | |
| | Rotary kiln #3 with preheater (32-026) | |
| | Rotary kiln #4 with preheater (32-250) | |
| | 03 | Generator |
| 04 | Fugitive | Fugitive emission sources |

III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

| Pollutant | Tons/Year |
|------------------------------------|-----------|
| Volatile Organic Material (VOM) | 27.1 |
| Sulfur Dioxide (SO ₂) | 1245.1 |
| Particulate Matter (PM) | 2392.9 |
| Nitrogen Oxides (NO _x) | 1766.9 |
| HAP, not included in VOM or PM | |
| Total | 5432.0 |

This permit is a combined Title I/CAAPP permit that may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit by T1, T1R, or T1N. The source has requested that the Illinois EPA establish or revise such conditions in

a Title I permit, consistent with the information provided in the CAAPP application. Any conditions established in a construction permit pursuant to Title I and not revised or deleted in this permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the 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.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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