

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE

Illinois Cement Company  
Attn: Kevin Keegan  
1601 Rockwell Road  
La Salle, Illinois 61301-0442

Application No.: 95090101                      I.D. No.: 099030AAZ  
Applicant's Designation:                      Date Received: September 7, 1995  
Operation of: Portland cement Manufacturing  
Date Issued: TO BE DETERMINED                      Expiration Date<sup>2</sup>: DATE  
Source Location: 1601 Rockwell Road, La Salle, La Salle County  
Responsible Official: Kevin Keegan

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

<sup>1</sup> This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

<sup>2</sup> Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Illinois Cement Company  
1601 Rockwell Road  
La Salle, Illinois 61301  
815-224-2112

I.D. No.: 099030AAZ  
Standard Industrial Classification: 3241, Cement Hydraulic

1.2 Owner/Parent Company

Illinois Cement Company  
1601 Rockwell Road  
La Salle, Illinois 61301

1.3 Operator

Illinois Cement Company  
1601 Rockwell Road  
La Salle, Illinois 61301

Kevin Keegan  
815-224-2112

1.4 General Source Description

The manufacturing process of Portland cement consists of several distinct steps. In a process flow orders the steps are: Mineral Extraction and Preparation; Pyroprocessing; Cooling and Grinding and Storage and Shipment.

The largest material throughputs are associated with these four processes. There are also smaller materials handling aspects, which are done to support these steps in preparation of the final product. One of these aspects is the handling of the fuel to support the Pyroprocessing system. In the case of Illinois Cement Company coal is the major fuel used besides use of tire derived fuel and petroleum coke in the kiln section. Another smaller aspect of material handling takes place in the finish grinding area where gypsum is used to modify the characteristics of the ground clinker cement, and is used at the rate of 4 to 5% of the finished product by weight.

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 Celcius
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 <sup>2</sup>	Feet square
ft <sup>3</sup>	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 <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards

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OM	Organic Material
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psia	Pounds per square inch absolute
RMP	Risk Management Plan
scf	Standard cubic foot
SO <sub>2</sub>	Sulfur Dioxide
T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
wt.	Weight
yr	Year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

None

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

1-4500 gallon Diethylene Glycol tank

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
4	Fuel Oil Storage Tanks	201.210(a)(11)
2	Used Oil Storage tanks	201.210(a)(10)
1	Teledyne-VG4D 25 HP gasoline engine	201.210(a)(15)
22	Comfort heaters, Natural Gas 30,000 to 360,000 Btu/hr	201.210(a)(4A)
2	Hotsy #2 Fuel fired steam cleaners 385,000 Btu/hr	201.210(a)(4B)
4	Water Heaters 3-199,000 and 1-231,000 Btu/hr	201.210(a)(4A)
3	White Heaters LP gas 3-168,000 Btu/hr	201.210(a)(4A)
1	Quarry Shop heater, LP gas 360,000 Btu/hr	201.210(a)(4A)
1	Quarry Shop heater, clean burn used oil 385,000 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	Description	Emission Control Equipment
01	Aggregate crushing: Primary Crusher	110, 115 and 119 Baghouses
02	Grinding of raw materials Roller mill (Loesche Mill)	422 Baghouse
	Raw feed system: Raw blending, raw mix storage, kiln feed tank	311 Baghouse, 341 Baghouse, 404 Baghouse, 312-01 Baghouse, 312-02 Baghouse
	Fly ash storage and feeding system	341 Baghouse
	Pre heater kiln	422 Baghouse
	Clinker cooler	429 Baghouse
	Clinker storage	437 Baghouse
	Clinker reclaim	604 Baghouse
	Mini mill #1	630 Baghouse
	Mini mill #2	611 Baghouse
	Mini mill #3	611 Baghouse
	#5 mill	722 Baghouse
Cement storage and loading	729, 807 and 809 Baghouses	
06	Gasoline Storage Tank 1000 Gallons	Submerged Loading
07	Fugitive Emissions	---

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<sub>x</sub>, PM, SO<sub>2</sub>, and VOM 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.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- 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 Fugitive Particulate Matter Operating Program

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].

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

5.2.4 Ozone Depleting Substances

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

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

5.2.5 Risk Management Plan

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

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
  - b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.
- 5.2.6
- 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.
- 5.2.7 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)	158.04
Sulfur Dioxide (SO <sub>2</sub> )	542.00
Particulate Matter (PM)	847.26
Nitrogen Oxides (NO <sub>x</sub> )	2281.50
HAP, not included in VOM or PM	9.20
Total	3838.00

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 - Mineral extraction

7.1.1 Description

Illinois Cement has limestone and shale deposits to the north of the plant which provide the minerals necessary for successful clinker production. The current limestone quarry is connected to the cement plant by a material conveying system. The limestone seam in this area is 28 to 30 feet thick. It is covered by a layer of top soil and shale. Contractors remove the overburden and drill holes into the limestone layer. An explosive charge is detonated which fractures the face of the limestone layer. The loose rock is then picked up by a portable shovel which loads the fractured material into large rock trucks. There are three rock trucks which travel from the working face of the quarry to the primary rock crusher, carrying an average load of 55 tons per trip. There is a smaller 35 ton truck as well.

The rock is then dumped into the primary crusher. A vibrating feeder controls the feed rate to the primary crusher. Emissions from the crusher are controlled by a baghouse dust collector known at the 110 baghouse. The plant numbering system is based on the progression of processes which are essential in the manufacturing of portland cement. Shale deposits are located just south of the primary crusher. Shale is used in much smaller proportions than is limestone. A front end loader loads the shale material into the rock trucks which dump the material at the primary crusher. Shale is used in much smaller proportions than is limestone. A front end loader loads the shale material into the rock trucks which dump the material at the primary crusher inlet. The shale, which is much softer than the limestone, is run through the crusher to remove lumps and is conveyed to the raw storage building near the plant.

The conveying system consists of covered belt conveyors which carry the limestone and shale to storage areas near the plant. There are two spot dust collectors on the conveyor belt system. One is the 115-01 collector on the quarry stacker belt and the other baghouse is the 119 baghouse on the 103 belt drop point. Eight belts move the rock and shale over 10,000 feet on their way to processing.

The kiln is typically in continuous operation except for power failures, unplanned maintenance outages, and scheduled shutdown and repair periods. The quarry operation can provide more material than can be processed in a 24 hour period. The primary crusher averages 570 tons per hour while a typical kiln feed rate would be approximately 100 tons per hour. The crushed stone is split between the conveyor and the quarry reclaim pile. In an average eight hour day, 4,560 tons are crushed. Typically 2,280 tons are diverted to the quarry reclaim pile while the other 2,280 tons are conveyed to either the covered storage bins or the reclaim pile located near the plant. The maximum pile size for the quarry reclaim pile is 20,000 tons. A reclaim tunnel belt retrieves limestone from the quarry reclaim pile when the primary crusher is not running and material is needed at the plant. Enough excess limestone material can be stockpiled to provide for continuous operation of the kiln. The quarry is typically in operation 5 days per week and eight hours per day. Safety considerations make the extraction of limestone during daylight hours more desirable than at night.

Limestone can be conveyed to the limestone reclaim area for later recovery or it can be conveyed directly into the covered storage area. Shale is usually conveyed directly to a covered storage area. The shale resource at this plant is almost a soil-like consistency. Exposure to the elements may result in reformation of lumps in the shale which is undesirable from a mineral blending and mixing standpoint.

7.1.2 List of Emission Units and Pollution Control Equipment

Description	Emission Control Equipment	Date Constructed
Aggregate crushing: Primary Crusher	110, 115 and 119 Baghouses	Prior to 1974, modified after 8-1-85

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 000--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 Q, Particulate Matter Emissions From Stone, Clay, Glass and Concrete Manufacturing. This regulation is attached hereto and incorporated herein by reference (see Attachment 3).
- e. 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 PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).

7.1.5 Operational and Production Limits and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the affected 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:

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 feed preparation:

Raw material is conveyed from the storage areas to the Loesche Mill. Here the kiln exhaust gases are utilized to dry the mined materials. The Loesche Mill is a roller mill which receive heated air after it has passed through the kiln preheater. The ground raw material is conveyed to the raw mix silos. The ground raw material is analyzed for its mineral properties, and blended with components from one of the other 15 raw mix silos. There are two blend silos which are used to control the elemental formulation mix. When the proper balances have been assured, the material is fed into the kiln feed tank. Fly ash will be used to supplement the raw material feed. An elevated tank will be constructed in the raw material processing area. The tank will be equipped with a baghouse to control fine particles from pneumatic conveying. The fly ash will be blended with ground raw material from the Loesche Mill as it is blown into the blend silos.

#### Pyroprocessing:

The preheater is the feed end of the Pyroprocessing system. The raw materials are fed in a counter flow fashion to the combustion gases. This results in thermal efficiency, since no outside fuel source is used to dry the raw materials. In addition, the preheater kiln design results in a shorter kiln, which can result in more compact plant designs. The limestone in the preheater section reduces the amount of sulfur oxides which are emitted into the atmosphere. It also lowers the inlet temperature to the control device, which in this case is the 422 baghouse. The kiln is a refractory lined steel cylinder 13.5 feet in diameter by 190 feet long.

The kiln is fired by pulverized coal which is ground and blown into the hood end of the kiln. The petroleum coke is also introduced in this manner. Natural gas will be used for startup conditions, however it is not normally used once the kiln has attained operating temperatures.

The preheater is located at the opposite end of the kiln from the coal firing or hot end of the kiln. The preheater is a series of four cyclone shaped refractory

lines vessels which provide for heat transfer between the hot combustion gases and the ground raw material. The four steps in the heating of the raw material are as follows: Evaporation of uncombined water, dehydration of hydrated mineral forms, calcinations or release of CO<sub>2</sub>, and the solid state chemical reaction of oxides to form the cement clinker. Drying occurs up to 212 degrees F and dehydration goes through 800 degrees F. Calcination occurs up to 1,800 degrees F, while clinker formation take place up to 2,750 degrees F. For the most part, evaporation and dehydration take place in the preheater section while calculation and clinker formation occurs in the kiln.

The last stage of the preheater is where the whole tire fuel will be introduced into the kiln. The current plan is to install a whole tire feed system which allows introduction of tires into this last stage. The required stack testing has already been done to demonstrate the effect of whole tire fuel on kiln emissions. The whole tire system will accommodate both truck and passenger car tires. A covered storage area will be built south of the raw mineral storage area to receive the scrap tires. A conveying system will carry the tires up to the preheater area. The tires will be introduced through an air lock system.

The Preprocessing system can operate with the exhaust gases passing through the Loesche Mill (raw grinding) or they may bypass the Loesche Mill. The entire system operates under negative pressure. In order to prevent high temperatures in the 422 Kiln baghouse, additional ambient air is bled into the system to temper the kiln exhaust gas when the Loesche Mill is down for maintenance or repairs. The Loesche Mill is normally in operation, and provides extra conditioning of the kiln exhaust gas. The tempering of the air is necessary to preserve the bagfilter material which is rated to withstand 550 degrees F heat.

#### Cooling and Grinding:

Once the raw material has attained adequate temperature and residence time to form the cement clinker, it is discharged from the of end of the kiln. The rotating kiln is inclined to aid in material transport as the solids rotate in a cascading fashion. The material as discharged from the kiln is in excess of 2,000 degrees F and is glowing from its innate heat content. The material drops

into a chamber where ambient air is drawn in through a traveling grate heat exchanger. Fans 426-1 to 426-5 draw in ambient air. The clinker is cooled to approximately 250 degrees F and passes through a clinker breaker and is conveyed to the clinker storage building which measures 115 by 440 feet. The dilution air from the clinker cooler which has passed through the chain driven grate mechanism, may carry particulate matter in the air stream. Some of this air flow is diverted to the Raymond coal mill and is used to dry the coal. It also improves the thermal efficiency of the kiln by preheating the combustion air. The remainder of the clinker cooler air stream passes through the 441 air to air heat exchanger which cools the air stream before passing through the 429 clinker cooler baghouse. The clinker cooler baghouse also controls emissions from the clinker cooler conveyor.

The clinker storage building is covered but is open on the sides. An overhead tripper car conveying system drops the cooled clinker onto the storage piles. A reclaim belt below the clinker storage pile retrieves the clinker which has cooled further from the storage residence time. Occasionally there will be periods of time when it will be necessary to store clinker in the open. The clinker is usually stockpiled between the covered storage area and the earthen berm next to the Little Vermillion River. There may be additional fugitive emissions during these periods. The 602 reclaim belt conveys clinker from the covered storage area to either the large number 707 finish grinding mill or to one of three minimills. The proportion of gypsum and clinker is metered by weigh belts and fed into the ball mills. The ground clinker and gypsum are classified by an air separator. The oversized material is returned to the feed end of the finish grinding mill while the material with the finest required by the cement grade being produced is blown into the one of two storage areas. Small amounts of grinding aids are used to control temperatures in the mill itself and also used to control the characteristics of the finished ground cement. In some cases, the grinding will generate such an abundance of heat, that the ground cement must be cooled before being pneumatically transferred to the cement storage and shipping silos. The 707 or large number 5 mill is controlled by the 722 finish grinding baghouse collector. There are two baghouses which control emissions from the three minimills. Baghouse 611 controls two of the minimills and air separators. Baghouse 630 controls the third minimill and air separator and has a pickup for the 605 clinker elevator. There are two spot

collectors on the material transfer conveyors. Baghouse 604-01 controls dust from the 603 clinker reclaim tunnel and the 437 baghouse controls dust from the large 605 clinker elevator.

Storage and Shipment:

As mentioned in the previous section, the finished ground portland cement is blown into one of two sets of cement storage silos. The older cement silos located at the west end of the mineral processing area are used for storage only. All of the rail and truck loading is accomplished in the new silo area which was constructed in 1961, while the storage only silos date back to 1927. The blower air which is used to transport the portland cement through metal lines will suspend a certain amount of fine particles. As the cement falls into the silo, the displacement air is cleaned by dust collectors mounted on top of each of the silos. The collector for the old silos is the 729 baghouse collector. The 807 baghouse dust collector controls transfer emissions from the newer storage silos. The shipping scales are located below the new silo structure. There are six telescoping loading chutes which are mated to the loading ports for the truck or rail car. As the ground cement is transferred into the receiving vessel, the displacement air is controlled by six identical Sly baghouse collectors which are located in the mezzanine area above the loading bays. Those loading collectors are numbered 809-18 through 809-23 to correspond to silo numbers 18 through 23. The loading dust collectors vent to the loading bay which is typically open on both ends.

In the introductory section there was mention of additional material handling besides the mineral processing stream. The coal receiving pit is located north of the clinker storage area. The coal is usually conveyed directly to the coal storage area which somewhat resembles a battleship and is referred to as such by plant personnel. If the coal arrives in a frozen condition or has chunks too large for either the conveying or crushing equipment, a portable coal crusher can be used to reduce the coal to a more uniform size and consistency. It is used only occasionally when conditions require it. Coal can be received in the covered storage area, or it can be loaded into the receiving pit and can be conveyed into the coal storage bins.

If the coal is unusually wet or if market conditions exist such that surplus coal storage is advisable, coal may be stored outdoors. The surplus coal is usually stored adjacent to the older portland cement storage silos. Typical fuel usage is 8 tons per hour and includes coal and petroleum coke. The current operating permit limits coke firing up to 35% substitution by weight basis for the coal that would otherwise be fired. A permit application has been filed to allow coke burning up to 70% substitution by weight basis. The tire firing is limited to a 20% by weight substitution basis. The tire storage facility was described in the Pyroprocessing section of the report.

The covered storage area is also the location where the gypsum rock is stored. It is conveyed to gypsum bins located in the finish grinding areas of the plant. The gypsum is combined with the clinker material when it is ground in the finish mills.

7.2.2 List of Emission Units and Pollution Control Equipment

Source	Description	Control Equipment	Date Constructed*
Raw feed preparation	Grinding of raw materials Roller mill (Loesche Mill)	422 Baghouse	Prior to February 1974
	Raw feed system: Raw blending, raw mix storage, kiln feed tank	311 Baghouse, 341 Baghouse, 404 Baghouse, 312-01 Baghouse, 312-02 Baghouse	Prior to February 1974
	Fly ash storage and feeding system	341 Baghouse	September 1995
Pyro processing System	Pre heater kiln	422 Baghouse	February 1974
Cooling and Grinding	Clinker cooler	429 Baghouse	Prior 1974
	Clinker storage	437 Baghouse	After April 1972
	Clinker reclaim	604 baghouse	After April 1972
	Mini mill #1	630 Baghouse	Prior 1973

Source	Description	Control Equipment	Date Constructed*
Cooling and Grinding (Cont.)	Mini mill #2	611 Baghouse	Prior 1973
	Mini mill #3	611 Baghouse	Prior 1973
	#5 mill	722 Baghouse	Prior 1974
Shipping and Storage	Cement storage and loading	729, 807 and 809 Baghouses	1961

\*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 PM<sub>10</sub>, 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 cement plant 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<sub>x</sub>, PM, SO<sub>2</sub>, 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<sub>x</sub>, PM, SO<sub>2</sub>, 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

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manufacturing, Section 11.6, AP-42, Volume I, Fifth  
Edition, Supplement D, January, 1995.

7.3 Unit 03: Gasoline Storage Tank

7.3.1 Description

The tank is used for storing gasoline.

7.3.2 List of Emission Equipment and Pollution Control Equipment

Description	Emission Control	Date Constructed
Gasoline Storage Tank 1000 Gallons	Submerged Loading	1993

7.3.3 Applicability Provisions

- a. The "affected storage tank", 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 loading of any organic material in any stationary tank having a storage capacity of greater than 946 liter (250 gallon), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 215.122(b)]. Except as provided in the following exemptions: If the tank is a pressure tank then the limitations of 35 IAC 215.122(b) shall not apply [35 IAC 215.121(a)] or if no odor nuisance exists then the limitation of 35 IAC 215.122(b) shall only apply when the tank is used to store a volatile organic liquid with a vapor pressure of 2.5 psia or greater at 70° F (see Attachment 3).
- c. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary tank at gasoline dispensing operation, unless such tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)] (see Attachment 3).

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected storage tank is not subject to the requirements of 35 IAC 5121, because the tank is less than 40,000 gal.
- b. The affected storage tank is not subject to the requirements of 35 IAC 215.122(a), because the tank is less than 40,000 gal.

7.3.5 Operational and Production Limits and Work Practices

Each affected storage tank is subject to the applicable provisions of Condition 7.6.3. The affected storage tank shall be equipped and operated with a submerged loading pipe for submerged fill.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5, the affected storage tank is subject to the following:

None

Emission limits are not set for the affected storage tank, as potential to emit in the absence of permit limit is less than the significant and major source thresholds for any pollutant 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 Inspection and 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 each affected tank to demonstrate compliance with Condition 7.6.5 and 7.6.6 pursuant to Section 39.5(7) of the Act:

- a. Design information for the tank showing the presence of a submerged loading pipe or submerged fill;
- b. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- c. The throughput of the affected storage tanks, gal/yr; and

- d. The annual VOM emissions from the affected storage tanks based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

#### 7.3.10 Reporting Requirements

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

- a. Any loading of gasoline or other VOL into an affected tanks that is not in compliance with Condition 7.3.5, e.g., an inoperative or no "submerged loading pipe or submerged fill" within five days of becoming aware of the noncompliance status. This notification shall include a description of the event, the cause for the noncompliance, actions taken to correct the noncompliance and the steps taken to avoid future noncompliance.

#### 7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected tank without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. Changes to components related to either the "submerged loading pipe or submerged fill", including addition of new components and repair and replacement of components; and
- b. Changes in the material stored in a tank provided the tank continue to comply with the Conditions of Section 7.6.5 of this permit.

#### 7.3.12 Compliance Procedures

Compliance with the emission limits in condition 5.5 and 7.6.6 shall be based on the recordkeeping requirements in

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Condition 7.3.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected storage tank, the current version 4.09 of the TANKS program is acceptable, or any subsequent program submitted by the Permittee and accepted by Illinois EPA.

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	Control methods
Fugitive emissions-Quarry:  Over burden transfer Scraper transport Front end loading Quarry Haul roads Quarry processes Quarry reclaim pile Plant reclaim pile	Haul roads are watered, Conveyor belts are covered and drop distance to pile is controlled with adjustable stacker height
Fugitive Emissions-Plant:  Clinker conveying Coke and coal unloading Coal pile (0.22 acres Gypsum receiving Portland cement loading Portable coal crusher Plant roads Fly ash hauling	The clinker conveyor is covered. Clinker, coal, & gypsum are all stored under roof. Plant haul roads are watered. The telescopic chutes are used for cement loading.

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 the emission limits identified in Condition 5.2.2.
- c. The affected fugitive emission sources are 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).

- d. 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].

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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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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 <sup>2</sup>	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 <sup>2</sup>	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 <sup>2</sup>	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 <sup>2</sup>	0.0929 m <sup>2</sup>
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;
  - 5) Method 2C: Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube);

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- 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;
- f) 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;
- g) Estimated frequency of application of dust suppressants by location of materials; and
- h) 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.
- e) 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.
- f) Additional Emissions Limitations for the Granite City Vicinity as Defined in Section 212.324(a)(1)(C) of this Part.
  - 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.

- g) 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.
- h) 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:
    - A) The name and address of the source;
    - B) The name and address of the owner and/or operator of the source;
    - C) A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;
    - D) 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.
    - F) 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

- G) 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.
- i) 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  
 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
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, 2996)

**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,

- 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

FINAL DRAFT/PROPOSED CAAPP PERMIT  
 Illinois Cement Company  
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c) Limits for Process Emission Units For Which  
 Construction or Modification Commenced Prior to  
 April 14, 1972

P	Metric	English	E
	E	P	
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
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)

**Section 212.324 Process Emission Units in Certain Areas**

a) Applicability.

- 1) This Section shall apply to any process emission unit located in any of the following areas:
  - A) That area bounded by lines from Universal Transmercator (UTM) coordinate 428000mE, 4631000mN, east to 435000mE, 4631000mN, south to 435000mE, 4623000mN, west to 428000mE, 4623000mN, north to 428000mE, 4631000mN, in the vicinity of McCook in Cook County, as shown in Illustration D of this Part;
  - B) That area bounded by lines from Universal Transmercator (UTM) coordinate 445000mE, 4622180mN, east to 456265mE, 4622180mN, south to 456265E, 4609020N, west to 445000mE, 4609020mN, north to 445000mE, 4622180mN, in the vicinity of Lake Calumet in Cook County, as shown in Illustration E of this Part;
  - C) That area bounded by lines from Universal Transmercator (UTM) coordinate 744000mE, 4290000mN, east to 753000mE, 4290000mN, south to 753000mE, 4283000mN, west to 744000mE, 4283000mN, north to 744000mE, 4290000mN, in the vicinity of Granite City in Madison County, as shown in Illustration F of this Part.
- 2) This Section shall not alter the applicability of Sections 212.321 and 212.322 of this Subpart.

- 3) The emissions limitations of this Section are not applicable to any emission unit subject to a specific emissions standard or limitation contained in any of the following Subparts of this Part:
- A) Subpart N, Food Manufacturing;
  - B) Subpart Q, Stone, Clay, Glass and Concrete Manufacturing;
  - C) Subpart R, Primary and Fabricated Metal Products and Machinery Manufacture; and
  - D) Subpart S, Agriculture.
- b) General Emission Limitation. Except as otherwise provided in this Section, no person shall cause or allow the emission into the atmosphere, of PM-10, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- c) Alternative Emission Limitation. In lieu of the emission limit of 68.7 mg/scm (0.03 gr/scf) contained in subsection (b) of this Section, no person shall cause or allow the emissions from the following emission units to exceed the corresponding limitations in the following table:

Emissions Units	Emissions Limit	
	Metric	English
1) Shotblasting emissions units in the Village of McCook equipped with fabric filters as of June 1, 1991	22.9 mg/scm	0.01 gr/scf
2) All process emissions units at manufacturers of steel wool with soap pads located in the Village of McCook	5% opacity	5% opacity

- d) Exceptions. The mass emission limits contained in subsections (b) and (c) of this Section shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this subsection is not a defense finding of a violation of the mass emission limits contained in subsections (b) and (c) of this Section.

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- e) Special Emissions Limitation for Fuel-Burning Process Emission Units in the Vicinity of Granite City. No person shall cause or allow emissions of PM-10 into the atmosphere to exceed 12.9 ng/J (0.03 lbs/mmbtu) of heat input from the burning of fuel other than natural gas at any process emission unit located in the vicinity of Granite City as defined in subsection (a)(1)(C) of this Section.
  
- f) Maintenance and Repair. For any process emission unit subject to subsection (a), of this Section, the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in this Section shall be met at all times. This Section shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:
  - 1) Visual inspections of air pollution control equipment;
  - 2) Maintenance of an adequate inventory of spare parts; and
  - 3) Expeditious repairs, unless the emission unit is shutdown.
  
- g) Recordkeeping of Maintenance and Repair.
  - 1) Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with subsection (f) of this Section.
  - 2) The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

- 3) A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
  - 4) 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.
  - 5) 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.
  - 6) Upon written request by the Agency, a report shall be submitted to the Agency for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.
- 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 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)

**Section 212.423 Emissions Limits for the Portland Cement Manufacturing Plant Located in LaSalle County, South of the Illinois River**

- a) This Section shall apply to the portland cement manufacturing plant in operation before September 1, 1990 located in LaSalle County, south of the Illinois River. This Section shall not alter the applicability of Sections 212.321 and 212.322 of this Part to portland cement manufacturing processes other than those for which alternate emission limits are specified in subsection (b) of this Section. This Section shall not become effective until April 30, 1992.

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b) No person shall cause or allow emissions to exceed the emission limits set forth below for each process.

		PM-10 Emissions Limits	
		Rate	Concentration
		kg/hr	mg/scm
		(lbs/hr)	(gr/scf)
A)	Clinker Cooler	4.67 (10.3)	28.147 (0.012)
B)	Finish Mill High	2.68 (5.90)	26.087 (0.011)
	Efficiency Air Separator		

		PM-10 Emissions Limits Including Condensable PM-10	
		Rate kg/hr	Concentration
		(lbs/hr)	mg/scm
			(gr/scf)
A)	Raw Mill		
	Roller Mill(RMRM)	6.08 (13.4)	27.5 (0.012)
B)	Kiln without RMRM	19.19 (42.3)	91.5 (0.040)
	Operating		
C)	Kiln with RMRM	11.43 (25.2)	89.2 (0.039)

c) No person shall cause or allow any visible emissions from any portland cement manufacturing process emission unit not listed in subsection (b) of this Section.

d) The owner or operator of any process emission unit subject to subsection (b) or (c) of this Section shall maintain and repair all air pollution control equipment in a manner that assures that the applicable emission limits and standards in subsection (b) or (c) of this Section shall be met at all times. Proper maintenance shall include at least the following requirements:

- 1) Visual inspections of air pollution control equipment shall be conducted;
- 2) An adequate inventory of spare parts shall be maintained;

- 3) Prompt and immediate repairs shall be made upon identification of the need; and
  - 4) Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with subsection (e) of this Section.
- e) Recordkeeping of Maintenance and Repair.
- 1) Written records shall be kept documenting inspections, maintenance, and repairs of all air pollution control equipment. All such records required under this Section shall be kept and maintained for at least three (3) years, shall be available for inspection by the Agency, and, upon request, shall be copied and furnished to Agency representatives during working hours.
  - 2) The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly. These records shall include documentation of causes for pollution control equipment not operating or not operating properly, and shall state what corrective actions were taken and what repairs were made. In any quarter during which such a malfunction should occur, the owner or operator shall mail one copy of the documentation to the Agency.
  - 3) A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.
  - 4) Upon written request by the Agency, the owner or operator shall submit any information required pursuant to this Subpart, for any period of time specified in the request. Such information shall be submitted within ten (10) working days from the date on which the request is received.
- f) Testing to determine compliance with the emission limits specified for PM-10, condensible PM-10, and

detection of visible emissions shall be in accordance with the measurement methods specified in Sections 212.107 and 212.108 (a) and (b) of this Part. Ammonium chloride shall be excluded from the measurement of condensible PM-10.

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

**Section 212.424 Fugitive Particulate Matter Control for the Portland Cement Manufacturing Plant and Associated Quarry Operations Located in LaSalle County, South of the Illinois River.**

- a) Applicability. This Section shall apply to the portland cement manufacturing plant in operation before September 1, 1990 and associated quarry operations located in LaSalle County, south of the Illinois River. Associated quarry operations are those operations involving the removal and disposal of overburden, and the extraction, crushing, sizing, and transport of limestone and shale for usage at the portland cement manufacturing plant. This Section shall not become effective until April 30, 1992.
- b) Applicability of Subpart K of this Part. This Section shall not alter the applicability of Subpart K: Fugitive Particulate Matter.
- c) Fugitive Particulate Matter Control Measures For Roadways at the Plant.
  - 1) For the unpaved access roadway to the Illinois Central Silos Loadout, the owner or operator shall spray a 30 percent solution of calcium chloride once every 16 weeks at an application rate of at least  $1.58 \text{ L/m}^{(2)}$  ( $0.35 \text{ gal/yd}^{(2)}$ ) followed by weekly application of water at a rate of at least  $1.58 \text{ L/m}^{(2)}$  ( $0.35 \text{ gal/yd}^{(2)}$ ). This subsection shall not apply after the roadway is paved.
  - 2) The owner or operator of the portland cement manufacturing plant shall keep written records in accordance with subsection (e) of this Section.
- d) Fugitive Particulate Matter Control Measures for Associated Quarry Operations.

- 1) For the primary crusher, the primary screen, the #3 conveyor from the primary screen to the surge pile, and the surge pile feeders to the #4 conveyor, the owner or operator shall spray a chemical foam spray of at least 1 percent solution of chemical foaming agent in water continuously during operations at a rate of at least 1.25 L/Mg (0.30 gal/T) of rock processed.
  - 2) The owner or operator shall water all roadways traveled by trucks to and from the primary crusher in the process of transporting raw limestone and shale to the crusher at an application rate of at least 0.50 L/m<sup>2</sup> (0.10 gal/yd<sup>2</sup>) applied once every eight hours of operation except under conditions specified in subsection (d)(3) of this Section. Watering shall begin within one hour of commencement of truck traffic each day.
  - 3) Subsection (d)(2) of this Section shall be followed at all times except under the following circumstances:
    - A) Precipitation is occurring such that there are no visible emissions or if precipitation occurred during the previous 2 hours such that there are no visible emissions;
    - B) If the ambient temperature is less than or equal to 0°C (32° F); or
    - C) If ice or snow build-up has occurred on roadways such that there are no visible emissions.
  - 4) The owner or operator of the associated quarry operations shall keep written records in accordance with subsection (e) of this Section.
- e) Recordkeeping and Reporting
- 1) The owner or operator of any portland cement manufacturing plant and/or associated quarry operations subject to this Section shall keep written daily records relating to the

application of each of the fugitive particulate matter control measures required by this Section.

- 2) The records required under this Section shall include at least the following:
  - A) The name and address of the plant;
  - B) The name and address of the owner or operator of the plant and associated quarry operations;
  - C) A map or diagram showing the location of all fugitive particulate matter emission units controlled including the location, identification, length, and width of roadways;
  - D) For each application of water or calcium chloride solution, the name and location of the roadway controlled, the water capacity of each truck, application rate of each truck, frequency of each application, width of each application, start and stop time of each application, identification of each water truck used, total quantity of water or calcium chloride used for each application, including the concentration of calcium chloride used for each application;
  - E) For application of chemical foam spray solution, the application rate and frequency of application, name of foaming agent, and total quantity of solution used each day;
  - F) Name and designation of the person applying control measures; and
  - G) A log recording all failures to use control measures required by this Section with a statement explaining the reasons for each failure and, in the case of a failure to comply with the roadway watering requirements of subsection (d)(2) of this Section, a record showing that one of the circumstances for

exceptions listed in subsection (d)(3) of this Section existed during the period of the failure. Such record shall include, for example, the periods of time when the measured temperature was less than or equal to 0°C (32°F).

- 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.
- 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 required control measures were not implemented, the required control measures, the reasons that the control measures were not implemented, and the corrective actions taken. This report shall include those times when subsection (d) of this Section is involved. 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.

(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;
  - 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.

(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)

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**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



- c. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
2. Particulate matter emissions shall not exceed 0.01 gr/scf, 1.71 lb/hr, and 7.51 tons/yr. The hourly limit is based on the emission rate and maximum flow rate (20,000 acfm).
3. 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
4. These sources may be operated for 180 days under this construction permit.
- 5a. 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 particulate matter emissions and opacity from the affected facilities shall be measured during conditions which are representative of the maximum performance to show compliance with 40 CFR 60 Subpart 000. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
  - b. i. The following methods and procedures shall be used for PM emissions and opacity measurements.

USEPA Method 5, 40 CFR 60 Appendix A  
USEPA Method 9, 40 CFR 60 Appendix A
  - ii. A test shall consist of 30 sets of 24 consecutive observations.
- c. Opacity measurements shall be performed by a certified observer.
- d. The Illinois EPA shall be notified prior to these measurements to enable the Illinois EPA to observe these measurements. Notification of the expected date of the measurements shall be submitted to a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of measurement shall be submitted a minimum of five (5) working days prior to the actual date of the measurement. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the measurements.

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September 25, 2002

6. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

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

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

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: Illinois EPA, FOS Region 2  
USEPA

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT -- NESHAP - REVISED

PERMITTEE

Illinois Cement Company  
Attn: Eugene Hodges  
1601 Rockwell Road  
LaSalle, Illinois 61301

Application No.: 02010067  
Applicant's Designation:  
Subject: Six Dust Collectors  
Date Issued: May 30, 2002

I.D. No.: 099030AAZ  
Date Received: April 5, 2002  
Operating Permit Expiration  
Date: May 30, 2007

Location: 1601 Rockwell Road, LaSalle

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of six new dust collectors to replace the existing baghouses on the existing Area 809 storage and loadout operations as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. The cement loadout operations, including the new dust collectors, are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Portland Cement Manufacturing Industry, 40 CFR 63, Subpart LLL, because this source is a major source of hazardous air pollutants (HAP). [40 CFR 63.1340(b)(9)]
  - i. The opacity of emissions from each of these systems shall not exceed ten percent. [40 CFR 63.1348]
  - ii. The Permittee shall demonstrate initial compliance with the above opacity limit by conducting performance tests in accordance with Method 9 of Appendix A to 40 CFR Part 60. The performance tests shall be conducted under the conditions that exist when each system is operating at the highest load or capacity level reasonably expected to occur. The maximum six-minute average opacity exhibited during the test period shall be used to determine whether each system is in initial compliance with the limit. The duration of the Method 9 performance test shall be 3-hours (30 6-minute averages). [40 CFR 63.1349(b)(2)]
  - iii. The Permittee shall comply with other applicable requirements of 40 CFR Part 63, Subpart LLL with respect to work practices, recordkeeping and reporting.

- b. Notwithstanding the above, the cement loading operation will no longer be subject to this NESHAP if the source becomes an area source for purposes of this NESHAP, as recognized through the CAAPP permit for the source. In such case, the following provisions of the NSPS shall substitute for the above requirements, 40 CFR 60.62(b) for 40 CFR 63.1348 and 40 CFR 60.11(b) for 40 CFR 63.1349(b)(2).
2. The emissions from each loading system shall not have an opacity greater than 10 percent. [35 IAC 212.421]
3. At all times, the Permittee shall maintain and operate the dust collectors in a manner consistent with good air pollution control practice for minimizing emissions.
- 4a. Particulate matter (PM) emissions from the dust collectors shall not exceed 1.93 lb/hr and 8.45 tons/yr.
- b. This permit is issued based upon no increase in other emissions of the loading system, as the new dust collectors will enable improved capture of loading emissions.
5. The Permittee shall keep the following records for the dust collectors:
  - a. The Permittee shall maintain logs of inspection, maintenance, and repairs for the dust collectors to demonstrate good air pollution control practice.
  - b. The annual PM emissions for each calendar year based on monthly throughput, other operating records, and applicable factors and formulas, with supporting calculations.
6. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements. Reports shall describe the probable cause of such deviations and any corrective actions or preventive measures taken.
7. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five 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 electronic form (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.
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:

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

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

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

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.

Please note that this permit has been revised to reclassify the Permittee's source status.

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

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

OPERATING PERMIT -- NSPS SOURCE - REVISED

PERMITTEE

Illinois Cement Company  
Attn: Frank Plummer  
1601 Rockwell Road  
LaSalle, Illinois 61301

Application No.: 73110088 I.D. No.: 099030AAZ  
Applicant's Designation: 305-3DUSTCOLL Date Received: August 25, 1998  
Operating Permit Expiration Date: August 18, 2003  
Subject: Cement Manufacturing & Storage  
Date Issued: September 9, 1998  
Location: 1601 Rockwell Road, LaSalle

Permit is hereby granted to the above-designated Permittee to operate emission source(s) and/or air pollution control equipment consisting of a cement manufacturing plant, an addition of two dust collectors on existing raw blending silos, and a filter unit controlling the transfer point between the 305-1 and 305-2 conveyors as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

1. This cement manufacturing plant is subject to a New Source Performance Standard (NSPS) 40 CFR 60, Subparts A and F. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- 2a. Emissions of particulate matter from the kiln shall not exceed 0.30 lb per ton of feed (dry basis).
- b. Emissions of particulate matter from the clinker cooler shall not exceed 0.10 lb per ton of feed (dry basis); and
- c. Opacity of the gases shall be limited to 20 percent from the cement kiln, and shall be limited to 10 percent from all other emission sources.
- d. Emissions from handling, storing and reclaiming of clinker shall be limited to less than 10% opacity per New Source Performance Standards.
3. At all times, the Permittee shall also, to the extent practicable, maintain and operate the sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

4. The Permittee shall maintain and operate a continuous opacity monitoring system on the kiln and clinker cooler exhaust equipment. On or before the 30th day of each calendar quarter, the permittee shall submit to the Agency a report for the last preceding calendar quarter of any and all opacity measurements which exceed 20% from the cement kiln and 10% from the clinker cooler exhaust, averaged over a six minute period. These "excess opacity" reports shall provide, for each such incident, the percent opacity measured as well as the date and span of such incident. These reports shall also specify for each incident whether it occurred during startup, shut-down, or malfunction. If a malfunction is indicated in the report, all corrective actions taken, if any, shall be reported. The reports shall also specify, for each calendar quarter, the date of those periods during which the continuous monitoring system was not in operation.
5. The Permittee shall fulfill applicable recordkeeping requirements of the NSPS, 40 CFR 60.63(a).
6. This permit is issued based upon allowing operation of the kiln while burning petroleum coke up to 95% substitution on a weight basis.
7. This permit allows the burning of tire derived fuel (TDF) under the following conditions:
  - a. The TDF will be burned in a supplement with coal not to exceed 20% by weight.
  - b
    - i. If the Permittee increases the TDF supplement beyond 20% by weight, a stack test for particulate matter, opacity, sulfur dioxide and carbon monoxide shall be performed within 45 days of commencement of burning such supplemental fuel. The same procedures for test methodology and notification will apply as it appears on the routine performance stack test.
    - ii. The Permittee will conduct a stack test for particulate matter or other pollutants regulated by the Act, within 45 days of an Agency request. The Agency may request a test if observations of the cement kiln indicate that the applicable emission limit may not be met.
  - c. The Permittee shall notify the Agency in writing upon commencement of routine burning of TDF. the Permittee shall keep appropriate records showing the amount of TDF received and supplemented.

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- d. The Permittee shall provide information on whole tire feed system handling along with the monitoring information upon any modification.
  
- 8. This permit is issued based upon the replacement of the permanent total enclosure controlling the transfer point between the 305-1 and 305-2 conveyors with a filter unit which will result in no net increase in emissions.

It should be noted that this permit is revised to restate that operation of the kiln is allowed while burning petroleum coke up to 95% substitution on a weight based by adding Condition No. 6 of this permit.

If you have any questions on this, please contact Ernie Kierbach at 217/782-2113.

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

DES:ELK:jar

cc: Region 2  
USEPA, Region V

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
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JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Illinois Cement Company  
Attn: Joseph L. Baker  
1601 Rockwell Road  
La Salle, Illinois 61301

Application No.: 95030183  
Applicant's Designation: FLYASHSYSM  
Subject: Flyash Feeding System  
Date Issued: July 6, 1995

I.D. No.: 099030AAZ  
Date Received: March 31, 1995

Operating Permit Expiration  
Date: March 31, 1997

Location: 1601 Rockwell Road, La Salle

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of flyash storage and feeding system with fabric filter 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. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours</u> <u>(Hour/Year)</u>	<u>Particulate Matter Emissions</u> <u>Lb/Hour</u>	<u>Ton/Yr</u>
Flyash Feeding System	8736	0.2	0.9

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

3. This permit is issued based upon use of flyash as raw material substitution of shale to manufacture portland cement without significant increase for particulate matter emissions.

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
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If you have any questions on this, please call Shashi Shah at 217/782-2113.

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

DES:SRS:sad

cc: Region 3

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT

PERMITTEE

Illinois Cement Company  
Attn: Kevin Keegan  
1601 Rockwell Road  
LaSalle, Illinois 61301

Application No.: 96120095

I.D. No.: 099030AAZ

Applicant's Designation: 432DUSTC01

Date Received: December 23, 1996

Subject: Additional Dust Collector for an Existing Source

Date Issued: February 11, 1997

Operating Permit Expiration

Date: February 11, 1999

Location: 1601 Rockwell Road, LaSalle

Permit is hereby granted to the above-designated Permittee to CONSTRUCT and OPERATE emission source(s) and/or air pollution control equipment consisting of an addition of a dust collector for an existing source 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. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours</u> (Hour/Year)	<u>Particulate Matter</u> <u>Emissions</u>	
		<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
Transfer Point at Clinker Cooler Drag Chain to 433 Belt Conveyor	8,760	0.51	2.2

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

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

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

DES:SRS:jar

cc: Region 2

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

REVISED  
CONSTRUCTION PERMIT -- PSD APPROVAL -- NSPS SOURCE

PERMITTEE

Illinois Cement Company  
Attn: Frank Koepfel  
Liberty Street, Box 442  
LaSalle, Illinois 61301-0442

Application No.: 97030016 I.D. No.: 099030AAZ  
Applicant's Designation: PSDPLANTEXPAN Date Received: September 09, 1998  
Subject: Plant Expansion - Cement Production  
Date Issued: October 7, 1998  
Location: 1601 Rockwell Road, LaSalle

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a raw feed grinding roller mill; calcining vessel; preheater tower, pulverized solid fuel system; expanded baghouse and new stack for the existing kiln; new finish grinding mill with baghouse; and material transfer systems, all with baghouse control, to increase cement production, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

This permit also constitutes approval pursuant to the federal rules for Prevention of Significant Deterioration of Air Quality Regulations (PSD) to construct the above referenced equipment in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency (USEPA) and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the findings and conditions which follow:

Findings

1. Illinois Cement Company has requested a permit to increase cement production with construction of an additional raw feed grinding mill; calcining vessels, preheater tower; pulverized solid fuel firing system, expanded baghouse, and new stack for the existing NSPS regulated kiln; additional finish grinding mill with baghouse; and material transfer systems with baghouses. Illinois Cement currently

operates with a daily capability to produce 1,800 tons of cement clinker and is proposing to increase capacity to 3,000 tons of cement clinker per day.

2. The plant is located in the City of LaSalle in LaSalle County. The area is currently designated attainment for all air quality standards.
3. The plant is a major source under the federal PSD rules. The proposed project will increase potential annual emissions of 59.3 tons of particulate matter (PM), 292.4 tons of sulfur dioxide (SO<sub>2</sub>), 1,246.7 tons of nitrogen oxides (NO<sub>x</sub>), 3,018.0 tons of carbon monoxide (CO) and 91.1 tons of volatile organic compounds (VOC), as described in Table 1. The project is therefore subject to PSD review as a major modification for the above contaminants.
4. The new and modified equipment must be operated so that emissions are in compliance with (i) all applicable Pollution Control Board emission standards, (ii) federal New Source Performance Standards, (iii) Best Available Control Technology (BACT) pursuant to the PSD rules and Section 55(h) of the Environmental Protection Act, as set in conditions of this permit. The application submitted by Illinois Cement Company, as reviewed by the Illinois EPA shows that the project will comply with these requirements. This BACT determination meets or exceeds all applicable state and federal regulations.
5. The air quality analysis submitted by Illinois Cement Company and reviewed by the Illinois EPA shows that this project will not cause a violation of the national ambient air quality standards.
6. The Illinois EPA has determined that the application for the proposed project complies with all applicable Pollution Control Board Regulations, the federal New Source Performance Standards 40 CFR 60, Subparts A and F, and the federal Prevention of Significant Deterioration of Air Quality Regulations (PSD), 40 CFR 52.21.
7. A copy of the application, and the Illinois EPA's project summary and a draft of this permit were placed in a location in the City of LaSalle, LaSalle Clerk's Office at 745 - 2nd Avenue in LaSalle and the public were given notice and opportunity to examine this material and to submit oral and written comments on the proposed issuance of a permit for this facility.

The Illinois EPA is issuing approval subject to the following conditions and consistent with the specifications and data included in the application. Any departure from the conditions of this approval or terms expressed in the application would need to receive prior written authorization of Illinois EPA.

Conditions

1. Standard conditions for issuance of construction permits, attached hereto and incorporated herein by reference, shall apply to this project, unless superseded by the following conditions.
- 2a.
  - i. Emissions from the modified cement kiln shall not exceed 0.208 lbs of PM, 4.5 lbs of NO<sub>x</sub> and 0.8 lb of SO<sub>2</sub> per ton of clinker produced by the kiln. The NO<sub>x</sub> limit shall only apply in the maximum range at which the kiln is operated following installation of the calcining vessel. (See also Condition 6b(i)). Compliance with these limits shall be determined by testing in accordance with Condition 10, monitoring in accordance with Condition 11 and recordkeeping in accordance with Conditions 12, 13, 14, and 15.
  - ii. When a significant amount of the tire derived fuel is being used as supplemental fuel for the cement kiln (with calcining vessel), emissions of NO<sub>x</sub> shall not exceed 3.6 lb/ton clinker. For this purpose, a significant amount of tire derived fuel shall be considered to be being used if more than 8.0 percent of the heat input to the kiln from fuel is from tires.
  - iii.
    - A. The Permittee shall conduct two-year optimization studies to evaluate further reduction in NO<sub>x</sub> emissions from the modified kiln for: use of a significant amount of tire derived fuel, use of tire derived fuel in an amount that is not significant but that is greater than 2.0 percent heat input, and operation of the kiln if a calcining vessel is not constructed (i.e., Stage II is not completed).
    - B. At the beginning of the study, the Permittee shall submit its plan and emission evaluation protocol for the study to the Illinois EPA for review and comment.
    - C. At the conclusion of the study the Permittee shall submit a detailed report to the Illinois EPA for the Optimization Study, including the data and information that was collected and a proposal for any changes to the NO<sub>x</sub> emission limits.
    - D. Based on this initial period of operation and the Permittee's Optimization Study, the Illinois EPA may set more stringent BACT requirements for NO<sub>x</sub> in a revised permit for the modified cement kiln.
- b. The modified cement kiln shall be operated in conformance with good engineering and work practices to minimize emissions of CO and VOM. At a minimum, these practices shall include:

- i. Use of instruments to measure oxygen concentrations at appropriate locations in the kiln system, to facilitate adjustment of the air supply to the kiln to maintain combustion efficiency (minimize CO and VOM emissions).
- ii. The Permittee shall follow good operation/maintenance procedure for fuel supply system, burners, air supply, and minimize air leakage by maintaining good seals/enclosure.
- c. Emissions of PM from the raw mills shall be controlled by the baghouse(s) on the cement kiln. (In normal operations the kiln exhaust gases pass through the raw mill to dry the feed prior to discharge through the kiln baghouse(s)). However, this shall not affect the PM emissions allowed from the kiln exhaust as addressed by paragraph (a).
- 3. Emissions of PM from the pulverized solid fuel system, finish grinding mill, enclosed material storage tanks and material conveyor systems shall be controlled by fabric filters (baghouses) that achieve an outlet loading of no more than 0.015 gr/dscf.
- 4. The Permittee shall maintain plant roads, parking lots and other areas normally used by vehicles and outdoor material storage areas in appropriate condition to minimize fugitive dust, including the following measures:
  - a.
    - i. Emissions of fugitive particulate matter from coal/coke haul road shall be controlled by paving the road and vacuum sweeping of the road at least once a day, unless measurable precipitation has occurred during the previous 48 hours or there is snow or ice build up on the road.
    - ii. If the natural wind screen action from trees fails to prevent material from coal/coke stockpiles becoming airborne, the coal/coke stockpile shall be treated with mineral oil or other dust suppression agent to minimize fugitive dust.
    - iii. The Permittee shall pave and maintain all plant roads normally handling trucks hauling gypsum, shale/flyash, and cement.
  - b. The Permittee shall pave and maintain all plant yards normally handling trucks hauling gypsum, shale/flyash, and cement.

Conditions 2, 3 and 4 represent the application of Best Available Control Technology (BACT) as required by Section 165 of the Clean Air Act.

- 5a. i. This cement manufacturing plant is subject to a New Source Performance Standard (NSPS) for Portland Cement Plants 40 CFR 60, Subparts A and F. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- ii. The plant is subject to a new source performance standard for new pulverized solid fuel firing system under coal preparation plants 40 CFR 60, Subpart Y.
- b. i. The particulate matter shall not exceed 0.3 pound per ton of kiln feed from the cement kiln, and 0.1 pound per ton of kiln feed for the clinker cooler, pursuant to the NSPS, 40 CFR 60.62(a) and (b).
- ii. The opacity of gases discharged into the atmosphere shall not exceed 20 percent from the cement kiln and 10 percent from clinker cooler and other affected facilities, except cement kiln, pursuant to 40 CFR 60.62(a), (b) and (c).
- c. i. At all times, the Permittee shall maintain and operate facilities that are subject to the NSPS, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required per NSPS, 40 CFR 60.11(d).
- ii. The emissions and opacity from the addition of pulverized solid fuel firing system shall not exceed the applicable limits of 0.018 grain PM/dscf and 10% opacity pursuant to 40 CFR 60.252.
- d. This permit is issued based on the following facilities at the source not being subject to NSPS for Portland Cement Plants because they were constructed prior to August 18, 1971 and have not been modified or reconstructed thereafter, nor will they be modified or reconstructed as part of this project:
- Small Finish Mills (#1, #2, #3)  
Old Cement Storage Silos
- 6a. Emissions and operation of equipment shall not exceed the following limits. These limits shall take effect upon initial commencement of operations of new equipment:

<u>Item of Equipment</u>	<u>Particulate Matter Emissions</u>	
	<u>(Lb/Hour)</u>	<u>(Ton/Yr)</u>
Blending Silos (311, 312-01,312-02)	1.157	5.07
Finish Collector (F-8)	0.771	3.4
Clinker Cooler (429)	20.833	91.24
Existing No. 5 Finish Mill (722)	4.95	21.68
Existing Mini Mills No. 2 and 3 (611)	1.908	8.35
Existing Mini Mill No. 1 (630)	0.944	4.13
New Finish Mill (F-9) Separator collector	4.88	21.4
Finish Silo (807 Modified)	0.514	2.3
Raw Mill Collector - F-4 (C413, 422)	0.193	0.84
F-K Pump Collector (F-2)	0.514	2.30

- b. i. Emissions and operation of the kiln cement and raw mills (existing Loesche and New Mill) shall not exceed the following limits with compliance determined at the exhaust of the baghouse (422). These limits shall take effect upon initial commencement of operation of kiln with associated modified equipment:

<u>Pollutant</u>	<u>(Lb/Hour)</u>	<u>(Ton/Yr)</u>
PM*	26.0	113.9
CO	1,325.0	5,803.5
NO <sub>x</sub>	562.5	2,463.7
SO <sub>2</sub>	100.0	438.0
VOM	40.0	175.2

\*This limit does not include condensible particulate compounds such as calcium sulphate which exist as gases in the exhaust to the atmosphere from the kiln. These condensibles are assumed to be twice the filterable particulate matter, i.e., 52 pounds/hour, for purposes of the air quality analysis required by the PSD rules.

- ii. The Permittee shall not alter any parameters of the kiln stack or operating or design characteristics of the kiln exhaust, as identified in its application so as to reduce dispersion without the prior written authorization. Upon achievement of routine operation by the modified kiln:
- A. The kiln shall exhaust through a stack with at least 190 ft. height above grade.
  - B. The exhaust velocity shall be at least 63.6 ft/second as would be determined by USEPA Method 1, except during startup and shutdown of the kiln.

- C.
  - 1. For purposes of this requirement, startup is defined as the period of time when setting a burner in operation from the first introduction of raw feed to the kiln until a normal feed flow rate has been achieved. All reasonable measures shall be taken to expeditiously achieve stable operation with coal, coke, gas and/or tire derived fuel.
  - 2. When the raw feed rate (not including fuel) to the kiln is less than 38 tons per hour, the kiln is not considered to be in routine operation.
- c. The kiln shall be operated and maintained as follows to minimize emissions during periods of startup.
  - i. All continuous monitoring systems required by Condition 11 shall be in service and reporting data throughout a startup.
  - ii. Process conditions shall be within limits established by the equipment manufacturers as prescribed in the standard operating procedures during periods of startup.
  - iii. All combustion air controls and equipment shall be operational prior to firing solid fuel.
- 7a. The Permittee shall implement a fugitive dust control program for normal traffic pattern roads and parking lots at the plant and for material handling and storage performed outdoors.
- b. The Permittee shall submit a written plan for the fugitive dust control program to the Illinois EPA for review at least 60 days prior to startup of new equipment. The plan shall describe the measures to be implemented to control fugitive dust at each area of the plant with the potential to generate fugitive dust, including technique (e.g., water spray, surfactant spray, water flushing, or sweeping), typical flow of water and additive concentration, normal frequency with which measures would be implemented, and circumstances, e.g., recent precipitation, in which the measure would not be implemented.
- c. This plan shall be accompanied by maps or diagrams indicating the location of areas at the plant with the potential to generate fugitive dust, with description (length, width, surface material, etc.) and volume and nature of expected traffic or other activity.
- 8. The Permittee shall notify the Illinois EPA prior to commencing construction of alterations to the kiln baghouse(s) if it elects to expand the existing baghouse rather than install an additional baghouse in parallel. This notice shall describe how construction will be conducted.

- 9a. The new equipment covered by group of equipment for each stage in this permit may be operated following completion of each stage of construction for a limited period, not to exceed 180 days, under this construction permit for the purpose of shakedown and testing.
- b. The Permittee shall notify the Illinois EPA in writing within 5 days of the following events each new or modified facility subject to the NSPS, including. For purposes of this permit, achievement of routine production means that equipment operates at a normal operating schedule for 7 consecutive days of operation.
- i. Commencement of construction.
  - ii. Initial commencement of operation.
  - iii. Achievement of routine production.
- 10a. i. Within 180 days of achieving the maximum production rate, the PM, PM-10, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOM emissions and opacity of the kiln shall be measured by an approved testing service, during conditions which are representative of maximum emissions.
- ii. Within 180 days of achieving the maximum production rate, any other testing of new equipment subject to 35 Ill. Adm. Codes and NSPS, e.g. new finish mill, etc. shall be measured by an approved testing service, during conditions which are representative of maximum emissions.
- iii. Emission testing shall also be performed within 90 days of a written request from the Illinois EPA, in accordance with such request.
- b. i. The emission testing shall be performed under two modes of operation, namely: I, operation while burning only coal/coke/gas; and II, operation at the maximum tire derived fuel(TDF) substitution rate established from progressive feed rates, as indicated in the application, if a significant amount of TDF is being used.
- ii. The tests shall be conducted during circumstances which are representative of maximum emissions, as described in the notice required by paragraph (d). Equipment data and material usage during the test shall be recorded.
- c. USEPA test methods 40 CFR 60, Appendix A shall be used for following testing by an approved testing service unless another method is approved by the Illinois EPA.

Location of Sample Points                   USEPA Method 1  
Gas Flow and Velocity                    USEPA Method 2

- i.    A.    Particulate Matter (USEPA Method 5).
  - B.    Particulate Matter PM-10 (USEPA Method 201A).
  - C.    Condensible Particulate Matter (USEPA Method 202).
  - ii.   Sulfur Dioxide (USEPA Method 6).
  - iii.  Nitrogen Oxides (USEPA Method 7).
  - iv.   Carbon Monoxide (USEPA Method 10).
  - v.    Volatile Organic Compounds (USEPA Method 25).
  - vi.   Opacity (USEPA Method 9).
- d.   Prior to carrying out these tests, the Illinois EPA's regional office and the Illinois EPA's Source Emission Test Specialist shall be notified a minimum of sixty (60) days prior to the expected date of these tests and further notified a minimum of ten (10) working days prior to the test of the exact date, time and place of these tests, to enable the Illinois EPA to witness these tests.
- Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
- Illinois Environmental Protection Agency  
Division of Air Pollution Control - Regional Office  
5415 North University  
Peoria, Illinois 61614
- e.    Three (3) copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 14 days after the test results are compiled and finalized, prior to or accompanying the operating permit application.
  - f.    The Final Report shall include records of laboratory analyses for the coal, coke, TDF and maximum petroleum coke substitution rate for the test plan.
- 11a. The Permittee shall maintain, calibrate, and operate continuous opacity monitoring systems on the kiln and clinker cooler exhaust pursuant to 40 CFR 60.63(b).

- b. On or before the 30th day of each calendar quarter, the Permittee shall submit to the Illinois EPA a report for the last preceding calendar quarter of any and all opacity measurements which exceed 20 percent from the cement kiln and 10 percent from the clinker cooler exhaust, pursuant to 40 CFR 60.7(c), 60.63(b) and 60.65(a).

For the purpose of these reports, periods of excess emission that shall be reported are six minute periods during which average opacity exceeds that allowed. These "excess opacity" reports shall provide, for each such incident, the percent opacity measured as well as the date and span of such incident. These reports shall also specify for each incident whether it occurred during startup, shut-down, or malfunction. If a malfunction is indicated in the report, all corrective actions taken, if any, shall be reported.

The reports shall also specify, for each calendar quarter, the date of those periods during which the continuous monitoring system was not in operation.

- c. At least 90 days prior to making any changes to these opacity monitoring systems in conjunction with this project, the Permittee shall submit a written description of such changes to the Illinois EPA for review.
- 12a.
    - i. The Permittee shall fulfill applicable recordkeeping requirements of daily production rates and kiln feed rates, pursuant to NSPS, 40 CFR 60.63(a).
    - ii. The Permittee shall install, calibrate, maintain and operate a device for measuring the mass rate of kiln feed to kilns. The measuring device shall be accurate to within plus or minus 5% of the mass rate over its operating range. The device is required to be operated during compliance emission tests, pursuant to NSPS, 40 CFR 60.63(c).
  - b. The operating pressure drop across the kiln baghouse(s) modules shall be monitored and recorded at least once every eight hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- 13. The Permittee shall maintain an operating and maintenance log for kiln baghouses, including the following:
    - a. Inspections of the baghouse, with date, nature of inspection and observations
    - b. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions, and

- c. Maintenance activities, with repair actions, and replacements, etc.
14. 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 requirements of this permit.
- a. Sulfur, ash and heat content of each type of fuel fired in the kiln, determined by representative sampling and appropriate analysis method on at least a weekly basis.
  - b. Feed to the kiln, tons/day.
  - c. Fuel to the kiln, tons/day by type, e.g, coal, coke, gas, TDF
  - d. Sulfur content of the fuel to the kiln, lb sulfur per million Btu, with supporting calculations.
  - e. Kiln daily hours of operation, if not continuous, hours/day.
  - f. Clinker production tons/day.
  - g. Daily fugitive dust control measures including application of water, chemicals, sweepings etc.
15. The Permittee shall submit quarterly reports to the Illinois EPA within 30 days following the end of each calendar quarter which shall include the following information for each month during the calendar quarter:
- a. The total quantity of each fuel burned, by type, in tons.
  - b. Maximum sulfur content of the fuel mixture, as burned, lb sulfur per million Btu heat input.
  - c. Emissions of PM, SO<sub>2</sub>, NO<sub>x</sub>, CO and VOM with supporting data and calculation.
  - d. Any exceedance of applicable requirements, with date, duration, description, cause, if known, and remedial action, if any, if not otherwise reported.
- 16a. The Permittee shall notify the Illinois EPA in writing as required by 40 CFR 60.7, including the following, for each new or modified emissions unit subject to the NSPS covered in this permit.
- i. Notice of commencing construction shall be submitted within 15 days of the start of construction.

- ii. Notice of intent to initially operate the emission unit covered by this permit, 30 days prior to the anticipated date of initial operation.
  - iii. Notice of the actual date of initial startup shall be submitted within 15 days of the initial startup.
- b. The Permittee shall also provide the following status reports to the Illinois EPA;
- i. Prior to commencing construction, project status reports shall be submitted every 3 months.
  - ii. After commencing construction progress, reports shall be submitted every 30 days until an operating permit is granted.
- c. The Permittee shall notify the Illinois EPA within 30 days of any changes in the use of the tire derived fuel by the kiln (with calcining vessel) that would trigger the need for an Optimization Study for NO<sub>x</sub> emissions (See Condition 2(a)(iii)).
17. Any records or logs required by this Permit shall be retained for at least three years from the date of an entry and be available for inspection and copying by the Illinois EPA unless otherwise indicated.
18. Any required reports and notifications concerning equipment operation, performance testing or a continuous monitoring system 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  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276
- 19a. This permit expires 18 months from its effective date, unless a continuous program of construction has been commenced by that date. This provision supersedes Standard Condition 1.
- b. The permit allows for staged construction of the finish mill and stack modification (Stage I), preheater, coal mill, and baghouse (Stage II) and raw mill addition (Stage III) systems provided that the construction of each stage is started, i.e., a binding construction contract is issued and on-site construction activity is begun by the Permittee without an 18 month gap in construction activity, as addressed above. (The planned schedule for commencing each stage is as follows: May, 1998, January, 2000, and January, 2002 for Stage I, II, and III, respectively.)

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
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Application No.: 95090101  
September 25, 2002

- 20a. This approval to construct does not relieve the permittee of the responsibility to comply with all Local, State and Federal Regulations which are part of the applicable Illinois State Implementation Plan, as well as all other applicable Federal, State and Local requirements.
- b. These other requirements include timely compliance with applicable requirements pursuant to 40 CFR 63 under Standards for Hazardous Air Pollutants emissions for Portland Cement Manufacturing Industry, following promulgation of such standards by USEPA.

Please note that this permit has been revised to allow for stack modification to occur during Stage I of the three stage construction rather than Stage II.

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

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

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FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

JOINT CONSTRUCTION AND OPERATING PERMIT - NSPS - REVISED

PERMITTEE

Illinois Cement Company  
Attn: Kevin Keegan  
1601 Rockwell Road  
LaSalle, Illinois 61301

Application No.: 98060003  
Applicant's Designation: COALSTRCON  
Subject: Coal Storage Conveying System  
Date Issued: February 25, 1999

I.D. No.: 099030AAZ  
Date Received: December 2, 1998

Operating Permit Expiration  
Date: February 25, 2004

Location: 1601 Rockwell Road, LaSalle

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 325 foot enclosed conveyor belt feeder with a single transfer point located at the top of the existing coal 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. This permit is issued based upon the new conveyor system replacing the existing conveyor system and emissions of fugitive particulate matter from the coal/coke haul road being controlled by twice daily watering unless measurable precipitation has occurred during the previous 48 hours or there is snow or ice building up on the road, resulting in no net increase in emissions.
  - b. This permit is issued based upon this project not constituting a major modification in accordance with 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality (PSD). Maximum potential emissions are less than significant net emission increases.
- 3a. The new coal conveyor with one transfer point is subject to the New Source Performance Standard (NSPS) for Coal Preparation Plants, 40 CFR 60, Subparts A and Y. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

- b. The new coal conveyor shall not allow the discharge into the atmosphere of gases which exhibit 20% opacity or greater, pursuant to 40 CFR 60.252 (c).
  - c. Opacity of the new conveyor shall be determined by Method 9, pursuant to 40 CFR 60.254(b)(2).
4. Emissions and operation of the new conveyor system shall not exceed the following limits:

Maximum Process Weight Rate (Ton/Hour)	Maximum Operating Hours (Hr/Yr)	E M I S S I O N S			
		P M		P M <sub>10</sub>	
		(Lb/Hr)	(Ton/Yr)	(Lb/Hr)	(Ton/Yr)
260	5,824	0.78	2.27	0.39	1.14

These limits are based upon maximum operating hours, maximum process weight rate, and emission factors calculated based on AP-42, 5th Edition, Volume I, Section 13.2.4, January 95 (assuming mean wind speed of 8 mph, average moisture content of 2.525%, PM particulate size multiplier of 0.74 and PM<sub>10</sub> particulate size multiplier of 0.35).

- 5. The Permittee shall maintain records of the following items for the new conveyor system at the source for a period of three years:
  - a. Operating hours of the new conveyor system, (hr/mo).
  - b. Quantity of material conveyed by the new conveyor system, (ton/mo and ton/yr).
  - c. Annual and average hourly emissions of PM and PM<sub>10</sub> based on material conveyed each month and the operating hours for that month, including supporting data and detailed calculations.
- 6. 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.

It should be noted that this construction permit for a new conveyor system supersedes all previous permit conditions for the existing conveyor system.

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

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

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

DES:JRC:psj

cc: Region 2

FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

OPERATING PERMIT

PERMITTEE

Illinois Cement Company  
Attn: Vince Meehan  
1601 Rockwell Road  
LaSalle, Illinois 61301

Application No.: 99120084  
Applicant's Designation: 2722 BH  
Subject: Finish Mill Collector F-9  
Date Issued: January 7, 2000  
Location: 1601 Rockwell Road, LaSalle

I.D. No.: 099030AAZ  
Date Received: December 9, 1999  
Expiration Date: January 7, 2005

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of finish mill collector F-9 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 on the finish mill collector F-9 being in compliance with all applicable conditions in the PSD construction permit for said unit, permit No. 97030016 with no increase in emissions.

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

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

DES:KLS:jar

cc: Region 2  
USEPA-Region V

Attachment

Table I

The changes in emissions in tons per year are as tabulated below.

	Actual Emissions Before Project <u>(Kiln)*</u>	Potential Emissions After Kiln/Associated <u>Modifications**</u>	Net <u>Change</u>
CO	2,785.5	5,803.5	3,018.0
NO <sub>x</sub>	1,217	2,463.7	1,246.7
SO <sub>2</sub>	145.6	438.0	292.4
VOM	84.1	175.2	91.1
PM	54.65	145.85	91.2

\* Existing kiln emissions reflect the lesser of average actual emissions based on stack test or AP-42 emission factor.

The kiln/baghouse emissions are evaluated based on the rate at which this kiln actually emitted during a representative two year period which is calendar year 1994 and 1995 prior to proposed modification.

\*\* Kiln/associated modifications emissions reflect emissions of CO, PM, NO<sub>x</sub>, SO<sub>2</sub>, and VOM based on BACT limits.

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FINAL DRAFT/PROPOSED CAAPP PERMIT  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 2002

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Illinois Cement Company  
Attn: Kevin Keegan  
1601 Rockwell Road  
LaSalle, Illinois 61301

Application No.: 97080048                      I.D. No.: 099030AAZ  
Applicant's Designation: 305-3DUSTCOLL      Date Received: August 18, 1997  
Subject: Dust Collector  
Date Issued: September 17, 1997  
Location: 1601 Rockwell Road, LaSalle

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a filter unit which will control the transfer point between the 305.1 and 305.2 conveyors as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This permit is issued based upon the replacement of the permanent total enclosure controlling the transfer point between the 305-1 and 305-2 conveyors with a filter unit which will result in no net increase in emissions.

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

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

DES:ELK:jar

cc: Region 2

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).

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

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

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



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

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

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

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

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

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

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

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

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

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

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

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

10.8 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  
Illinois Cement Company  
I.D. No.: 099030AAZ  
Application No.: 95090101  
September 25, 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

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 manufacturing process of Portland cement consists of several distinct steps. In a process flow orders the steps are: Mineral Extraction and Preparation; Pyroprocessing; Cooling and Grinding and Storage and Shipment.

The largest material throughputs are associated with these four processes. There are also smaller materials handling aspects, which are done to support these steps in preparation of the final product. One of these aspects is the handling of the fuel to support the Pyroprocessing system. In the case of Illinois Cement Company coal is the major fuel used besides use of tire derived fuel and petroleum coke in the kiln section. Another smaller aspect of material handling takes place in the finish grinding area where gypsum is used to modify the characteristics of the ground clinker cement, and is used at the rate of 4 to 5% of the finished product by weight.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Emission Control Equipment
01	Aggregate crushing: Primary Crusher	110, 115 and 119 Baghouses
02	Grinding of raw materials Roller mill (Loesche Mill)	422 Baghouse
	Raw feed system: Raw blending, raw mix storage, kiln feed tank	311 Baghouse, 341 Baghouse, 404 Baghouse, 312-01 Baghouse, 312-02 Baghouse
	Fly ash storage and feeding system	341 Baghouse
	Pre heater kiln	422 Baghouse
	Clinker cooler	429 Baghouse
	Clinker storage	437 Baghouse
	Clinker reclaim	604 baghouse
	Mini mill #1	630 Baghouse
	Mini mill #2	611 Baghouse
	Mini mill #3	611 Baghouse
	#5 mill	722 Baghouse
Cement storage and loading	729, 807 and 809 Baghouses	

Emission Unit	Description	Emission Control Equipment
06	Gasoline Storage Tank 1000 Gallons	Submerged Loading
07	Fugitive Emissions	---

### 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)	158.04
Sulfur Dioxide (SO <sub>2</sub> )	542.00
Particulate Matter (PM)	847.26
Nitrogen Oxides (NO <sub>x</sub> )	2281.50
HAP, not included in VOM or PM	9.20
Total	3838.00

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.