217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Holcim U.S., Inc.
Attn: Mark Coombs
3020 East 103rd Street
Chicago, Illinois 60617

Application No.: 98010040 I.D. No.: 031600FLD
Applicant's Designation: CHICWAL 90 Date Received: November 1, 2004
Subject: Grinding Plant for Blast Furnace Slag Cement
Date Issued: Expiration Date:
Location: 3020 East 103rd Street, Chicago, 60617

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of granulated blast furnace slag grinding and drying operation with loadout operations, controlled by baghouses pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., particulate matter less than 10 microns (PM_{10}) to less than 100 tons per year). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permits issued for this location.

2a. Annual slag throughput shall not exceed 100,000 tons per month or 1,000,000 tons per year. Compliance with the annual limit shall be determined monthly from the preceding 12 months of data.

b. The amount of material stored in the stockpile shall not exceed 10,000 tons at any time.

3a. Particulate matter emissions from emission units shall not exceed 0.03 gr/scf, pursuant to 35 Ill. Adm. Code 212.324(b).

b. At all times the Permittee shall also, to the extent practicable, maintain and operate these sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

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

5a. Fugitive emissions of particulate matter from the grinding mills, screens (except from truck dumping), roadways, parking areas and storage piles (at 4 feet from the pile surface), shall not exceed 10 percent opacity, pursuant to 35 Ill. Adm. Code 212.316(b), (c) and (d).

b. Fugitive emissions of particulate matter from all other emission units operations shall not exceed 20 percent opacity, pursuant to 35 Ill. Adm. Code 212.316(f).

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

Item of Equipment	Baghouse	Flow Rate (acfm)	Particulate Matter Emissions (Ton/Mo)	(Ton/Yr)
Transfer Point Between Feed Chute and Mill Feed Belt (T61-BC1)	T71-CF2	3,883	0.15	1.46
Mill Feed Belt Discharge (T61-BC1)	T71-CF4	3,883	0.15	1.46
Product Silo Bin Vent (621-351, 621-352)	T71-BF4	1,400	0.05	0.53
North Truck Loadout (621-LA1)	621-CF1	1,500	0.11	1.13
South Truck Loadout (621-LA2)	621-CF2	1,500	0.11	1.13
Rail Loadout (631-LA1)	631-CF1	1,500	0.11	1.13
Barge Loadout (641-TC1, 641-AS3, 641-AS4, 641-BE1)	641-BF1	4,000	0.15	1.50
Polycom Feed Components: (T61-BE1, T61-WF3, T61-WF2)	T71-BF1	31,500	1.18	11.83
Polycoms (T61-RP1 and T61-RP2)	T71-BF2	29,000	1.09	10.89
Ball Mill (T61-BM1)	T71-BF3	28,142	1.06	10.56
Product Collector from Separator (T61-SR1) and (T61-FN1)	T61-BF1	115,000	4.32	43.17
Airslide Conveyor (641-AS1, 641-AS2)	641-CF2	3,500	0.13	1.32
Barge Loading Spout	641-CF1	3,500	0.13	1.32
Barge Loading Bucket Elevator (641-BE1)	----	*	*	*
			Total:	87.43

* Included with barge loadout

These limits are based on a minimum baghouse efficiency of 0.010 gr/dscf, maximum operation rates and continuous operation. Compliance with annual limits shall be determined from a running total of 12 months of data.

7. Emissions and operation of the dryers shall not exceed the following limits:

		E M I S S I O N S							
Equipment	Firing Rate (mmBtu/Hr)	Particulate Matter (T/Mo)	Particulate Matter (T/Yr)	Nitrogen Oxides (T/Mo)	Nitrogen Oxides (T/Yr)	Carbon Monoxide (T/Mo)	Carbon Monoxide (T/Yr)	Volatile Organic Material (T/Mo)	Volatile Organic Material (T/Yr)
Shaft Dryer (T51-HG1)	27.5	0.09	0.92	1.21	12.05	1.01	10.12	0.07	0.66
5 Auxiliary Dryers T71-BU1 to T71-HG6, T71-HG3 T71-HG5, T71-HG6, and T71-HG7	10.0	(Included in Baghouse Emissions)		0.43	4.29	0.36	3.61	0.02	0.24

These limits are based on the maximum firing rates, standard emission factors (AP-42) and continuous operation. Compliance with annual limits shall be determined from a running total of 12 months of data.

8. Within 45 days of a written request from the Illinois EPA, the Permittee shall measure particulate matter emissions from process emission sources/control equipment as specified by the Illinois EPA.

9a. The Permittee shall maintain and operate a continuous baghouse leak detection monitor, with recorder, on each exhaust of baghouses T71-BF1, T71-BF2, T71-BF3, and T61-BF1. Each monitor shall be calibrated to ensure proper baghouse operation.

b. The Permittee shall maintain and operate an alarm on each baghouse leak detection monitor to indicate any malfunction of these baghouses.

10. The Permittee shall maintain records of the occurrence and duration of any malfunction of equipment which results in emissions in excess of applicable standards. These malfunctions shall be submitted to the Illinois EPA as required by the Standard Conditions attached to this permit.

11a. The Permittee shall do the following:

i. Maintain total enclosure on conveyors that are outside the slag processing building.

ii. Maintain total enclosure on the screens.

iii. Operate and maintain the conveyor discharge to the surge pile with a choke loading device or a telescopic chute.

iv. Operate and maintain the surge pile and dump hopper with water spray control. Water spray does not need to be operated when the material is sufficiently wet that no visible emissions occur.

v. Maintain plant roads which go to the truck dump hopper and the product bins.

b. The Permittee shall sweep, flush, or clean in an equivalent manner, the paved plant roads and parking areas at least 2 times per week, or more often if requested by the Illinois EPA.

c. Any operations generating fugitive emissions shall be operated in a manner consistent with those in the current fugitive dust plan submitted to the Illinois EPA, or in a manner which results in less fugitive emissions.

12. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in the Conditions of this permit.

    a. A log of the fugitive control measures performed, as specified in Condition 11.

    b. Material throughput (tons/month and tons/year).

    c. Baghouse Leak Detection Monitor data.

    d. Monthly and aggregate annual emissions of CO, NO_x, PM, and VOM from the source with supporting calculations (tons/month and tons/year).

13. Within 90 days of receiving a notification from the Illinois EPA, the Permittee shall implement a PM-10 contingency plan which will result in a reduction of the total actual annual source-wide Fugitive PM-10 emission by 15% for a Level I notice, and 25% for a Level II notice.

14. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA.

    As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

15. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

16. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

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

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

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

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

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

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

DES:GMK:jar

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the slag grinding plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, (i.e., 100 tons per year of PM_{10}), at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

Emissions (Tons/Year)

Emission Unit	Particulate Matter (PM)	Nitrogen Oxides (NO_x)	Carbon Monoxide (CO)	Volatile Organic Material (VOM)
Transfer Point Between Feed Chute and Mill Feed Belt (T61-BC1)	1.46			
Mill Feed Belt Discharge (T61-BC1)	1.46			
Product Silo Bin Vent (621-315, 621-352)	0.53			
North Truck Loadout (621-LA1)	1.13			
South Truck Loadout (621-LA2)	1.13			
Rail Loadout (631-LA1)	1.13			
Barge Loadout (641-TC1, 641-AS3, 641-AS4, 641-BE1)	1.50			
Polycom Feed Components: (T61-BE1, T61-WF3, T61-WF2)	11.83			
Polycoms (T61-RP1 and T61-RP2)	10.89			
Ball Mill (T61-BM1)	10.56			
Product Collector from Separator (T61-SR1) and (T61-FN1)	43.17			
Airslide Conveyor (641-AS1, 641-AS2)	1.32			
Barge Loading Spout	1.32			
Barge Loading Bucket Elevator (641-BE1)	*			
Shaft Dryer (T51-HG1)	0.92	12.05	10.12	0.66
5 Auxiliary Dryers T71-BU1 to T71-HG6, T71-HG3 T71-HG5, T71-HG6, and T71-HG7		4.29	3.61	0.24
Totals:	88.35	16.34	13.73	0.90

*   Included with barge loadout

GMK:jar