Bureau of Air Permit Section

File Organization Cover Sheet

Source Name:	Lafarge Midwest	
ID No.:	031 600 FHQ	
Application No.:	00 08 0028	
Category:	03M	
Item Date:	11/8/2000	
Keyword:	Choose an item.	
Comment:		
Part:	Choose Choose an item, Of an item.	,

* If applicable

IEPA-DIVISION OF RECORDS MANAGEMENT RELEASABLE

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REVIEWER: EMI

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Illinois Environmental Protection Agency

P.O. Box 19506, Springfield, Illinois 62794-9506 Thomas V. Skinner, Director

CONSTRUCTION PERMIT

PERMITTEE

LaFarge Midwest, Inc. Attn: Bill Voshell 4000 Town Center, Suite 2000 Southfield, Michigan 48075

Application No.: 00080028I.D. No.: 031600FHQApplicant's Designation: SLAGGRINDDate Received: August 14, 2000Subject: Slag ProcessingDate Issued: November 8, 2000Location: 2150 East 130th Street, Chicago, 60633

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a granulated Blast Furnace Slag grinding and drying operation with loadout operations, controlled by baghouses 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 source will not result in a major source for particulate matter₁₀. Therefore, this permit is not subject to 35 Ill. Adm. Code 203.
- 2. 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.
- 3. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- 4a. Particulate matter-10 emissions from vents or stacks shall not exceed 0.03 gr/dscf, 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.

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George H. Ryan, Governor

JUN 0 9 2015

REVIEWER: EMI

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Page 2

- 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: Particulate Matter

	Material Usage Emissi			sions
Item of Equipment	(Ton/Hr)	(Ton/Yr)	(Lb/Mó)	(Ton/Yr)
Cement Silo Unloading	1,600	14,016,000	3,214	18.92
Truck Loading/Unloading	880	7,710,000	134	0.77
Barge Unloading	320	2,803,200	643	3.78
Wet Slag Processing	300	850,000	305	0.77
Dry Slag Processing	85	744,600	3,586	21.11
Barge Loading	500	4,380,000	74	0.44
Ship/Vessel Loading	600	5,256,000	1,295	7.63
		Total:	9,251	53.42

These limits are based on standard emission factors, a minimum baghouse efficiency of 99.0%, 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 dryer shall not exceed the following limits:

		Emission				Maximum
		Factor/	Maximum	Maximum	Short-Term	Annual
	Emission	Throughput	Hourly	Annual	Emissions	Emissions
Pollutant	Factor	Units	Throughput	<u>Throughput</u>	(Lbs/Hr)	<u>(T/Yr)</u>
PM	0.018	Tons	85	744,600	1.53	6.70
PM-10	0.0082	Tons	85	744,600	0.70	3.05
SO2	0.0033	Tons	85	744,600	0.28	1.23
СО	0.056	Tons	85	744,600	4.80	20.85
VOM	0.051	Tons	85	744,600	4.34	18.99
NO _x	132	mmft ³	0.043	376.7	5.68	24.86

These limits are based on the maximum firing rates, standard emission factors (Emission Factor AP-42 Section 11.1 Asphalt Rotary Dyer, except for NO_x which is performance guarantee) 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.

Page 3 '

- 9a. The Permittee shall maintain and operate an alarm on each baghouse to indicate any malfunction of these baghouses.
- b. 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.
- Annual raw slag throughput shall not exceed 850,000 tons per year. Compliance with the annual limit shall be determined monthly from the preceding 12 months of data.
- 11a. The Permittee shall do the following:
 - Maintain total enclosure on any conveyors which are outside the slag processing building.
 - ii. Operate and maintain the 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.
 - iii. 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.
- 12a. i. 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 12.
 - B. Material throughput (ton/month).
 - C. Baghouse Leak Detection Monitor data.
 - ii. These records shall be retained for three years and shall be available for inspection by the Illinois EPA.
 - b. The Permittee shall submit the following with the Annual Report:
 - i. Throughput (ton per month and ton per year).
 - ii. Natural gas usage (mmft³/yr).

Page 4

iii. Annual emissions with supporting calculations.

- 13a. Prior to submitting the application for operating permit, the Permittee shall submit a PM-10 contingency plan, pursuant to 35 Ill. Adm. Code 212, Subpart U.
 - b. 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. Any required reports and notifications concerning equipment operation, testing or a continuous monitoring system shall be sent to the following address unless otherwise indicated:

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

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

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

DES: JPB: jar JPB 11/9/00 46

cc: Region 1

COPY Original Signed by Donald E. Sutton, P.E.



STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL P. O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless suspenseded by special condition(s).

- 1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
- 2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
- 3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.
- 4. The permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:
 - a. to enter the permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. to have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. to obtain and remove samples of any discharge or emissions of pollutants, and
 - e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.
- 5. The issuance of this permit:
 - a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. 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 proposed facilities,
 - c. does not release the permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

d. does not take into consideration or attest to the structural stability of any units or parts of the project, and IL 532-0226 APC 166 Rev. 5/99 -- 090-005

- e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.
 - b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
- 7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:
 - a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or
 - b. upon finding that any standard or special conditions have been violated, or
 - c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

	CALCULATION SHEE	ET
Facility: LAFARG	E MIDWEST, INC.	ID: 031600FHQ
Anal. Eng.: JPB	Date: 11/06/2000	P.N.: 00080028
Rev. Eng.:	Date:	Date Rec.: 08/14/2000

This application is for construction of additional equipment to process iron slag at this existing cement terminal.

NO -QRPT, LEGAL, Flag, CROPA, NSPS, NESHAP, FUG, TOX

Project - Grinding of blast furnace slag to produce a cement additive.

The application is for the addition of a slag grinding plant. The process consist of a dryer with dust collection system, one ball mill to handle the crushing of the slag controlled by a dust collector, raw material bins and product bins controlled by dust collectors. The existing cement loading operations will be utilized to load the slagcement product to trucks, barges and ships. All point source emissions are to be captured by the dust collection systems and vented to the baghouses.

NSPS -- By the definition in the NSPS, Slag is not a non-metallic mineral. Therefore, this facility is not subject to 40 CFR 60, Subpart OOO. This NSPS is not applicable for this project.

Item of	Materia	Usage	Particula	te Matter
Equipment	<u>Tph</u>	<u>Τργ</u>	Lb/month	<u>Ton/year</u>
Cement Silo Unloading	1,600	1,401,600	3,214	18.92
Truck loading/ unloading	880	7,710,000	134	0.77
Barge unloading	320	2,803,200	643	3.78
Wet Slag Processing	300	850,000	305	0.77
Dry Slag Processing	85	744,600	3,586	- 21.11
Barge Loading	500	4,380,000	74	0.44
Ship /vessel Loading	600	5,256,000	1,295	7.63
Total:			9,251	53.42

			Emissions	s Ib/Hour (Ton/Year)	
	Firing Rate	Particulate	Nitrogen	Carbon	Organic	Sulfur
Equipment	<u>Mmft3/hr</u>	<u>Matter</u>	<u>Oxides</u>	<u>Monoxide</u>	<u>Material</u>	<u>Dioxide</u>
Shaft Dryer	0.043	1.53 (6.70)	5.68 (24.86)	4.80 (20.85)	4.34 (18.99)	0.28 (1.23)

212.324(b) - requires PM-10 from any vents or stacks to be less than 0.03 gr./dscf. This will readily be met by the baghouses.

212.316 (b), (c) and (d) – grinding mills, screens, roadways, parking areas, and storage piles shall not exceed 10% opacity.

212.316(f) - 20% opacity from any other emission units.

212, Subpart U – a PM-10 contingency plan is required prior to operating.

NSR - non-attainment area for ozone (VOM) and PM-10.

<u>VOM</u>: The VOM is insignificant from the natural gas combustion. All VOM in the slag would be burned in the blast furnace at the iron foundry. The applicant has used the asphalt plant - drum dryer - emission factor for VOM emissions. This is overstating emissions since there is no asphalt cement used in the process.

PM-10: This slag grinding facility is not one of the 28 categories which fugitive emissions are included for NAA-NSR (not an iron or steel <u>mill</u>, not a <u>Portland</u> cement plant). The PM-10 process emissions are limited to 53.42 tpy and are based on continuous operation at maximum throughput. Therefore, the source will remain a minor source, not subject to the requirements of Part 203.

Stack testing

The new baghouses are designed to achieve a minimum of 99.95% and not to emit more than 0.01 gr./dscf. The PM-10 standard is 0.03 gr./dscf. No rule requires testing of this modified source. No stack test is necessary unless a specific request is made by the Agency.

Recordkeeping – material usage Natural gas usage Fugitive dust control records Baghouse monitoring data Emissions

Recommend: **GRANT** - construction permit with conditions

<u>CAERS</u> - no coding until incorporated operating permit.



	CALCULATION SHE	ĒT
Facility: ACTION	COLOR, INC.	ID: 111035AAS
Anal. Eng.: JPB	Date: 11/06/2000	P.N .: 95020116 & 00080031
Rev. Eng.:	Date:	Date Rec.: 08/15/2000

This application is for construction and revision of the operating permit.

NO -QRPT, LEGAL, Flag, CROPA, NSPS, NESHAP, FUG, TOX

FACILITY - Plastic pigmentation

The applicant requests the addition of 1 molding machine. The consultant of the applicant requests that the plastic extruders be exempt from the permits.

The process will now include the following:

Pigment/plastic mixing with baghouse 4 Plastic extruders (Exempt from the permit) 4 Plastic Injection Molders

The applicant also requests the maximum process rate, operating hours, and emissions be increased to the following:

Operating hours: 4000 hr/yr. Throughput: 10.0 tph Allowable PM emissions: 8.70 lb/hr or 17.4 ton/year.

Recordkeeping: Plastic processed and operating hours.

Recommend: GRANT- Construction and revision of the lifetime operating permit

CAERS -coding to be changed by CASM.

La Frivge 13,11 190001 Voshell Slag Plant Chicago (248) 948 1201 Replacing Pelan Micael Pelan + Rancy Hastings (314) 644 2223

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August 11, 2000

Mr. Donald Sutton Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section 1021 North Grand Avenue East Springfield, Illinois 62794-9276

RECEIVED AUG 1 4 2000 IEPA - DAPC - SPFLD

IBD10-12-89 → H. DESai R 010948

RE: Lafarge Midwest, Inc. – South Chicago Terminal; ID No. 031600FHQ Modification to Construct Slag Processing, and Barge and Ship Loadout Facilities

Dear Mr. Sutton:

Lafarge Midwest, Inc. is enclosing three copies of our application to modify the existing operations at the South Chicago Terminal site located at 2150 E. 130th Street in Chicago. The modifications include the construction of a slag processing plant, and facilities to allow for barge and ship loadout operations. The existing terminal facility receives Portland cement via ships, barges and trucks. Cement is loaded out to bulk tanker trucks for distribution to our customers. These operations are covered under Operating Permit No. 98010053, dated April 3, 2000.

The enclosed application addresses the construction and operation of the following new facilities:

- 1. A Granulated Slag Grinding and Processing Plant
- 2. Barge Loadout Facilities (for Portland cement and slag)
- 3. Ship Loadout Facilities (for Portland cement and slag)

If you have any questions, please direct them to me at (248) 948-1151.

Sincerely,

LAFARGE CORPORATION

Michael L. Pelan Regional Environmental Manager

Copy: John Cheong wo/enclosure Bob Fiolek, wo/enclosure Wayne Pake wo/enclosure Joe Ricker, So. Chicago Terminal w/enclosure File Copy

CEMENT GROUP/U.S. OPERATIONS P.O. Box 887, Southfield, MI 48037 Office: (248) 354-9050 Fax: (248) 354-0039

RECEIVED AUG 1 4 2000 IEPA - DAPC - SPFLD

Slag Processing Project Air Pollution Construction Permit Lafarge Midwest, Inc. 2150 East 130th Street Chicago Illinois

Prepared for:

Lafarge Midwest, Inc. 4000 Town Center, Suite 2000 Southfield, Michigan August 2000

Prepared by:

Hastings Engineering, Inc 7604 C Big Bend Boulevard Saint Louis, MO 63119

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STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL PERMIT SECTION P. O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506 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.

APPLICATION FOR PERMIT (A)		FOR AGENCY USE ONLY
	I.D. NO.	03 600 FHQ
	PERMIT NO.	00 08 0028
NAME OF EQUIPMENT TO BE CONSTRUCTED OR OPERATED Slag Processing (B)	DATE	8-14-00

1a. NAME OF OWNER:		2a. NAME OF OPERATOR:			
Lafarge Midwest, Inc. 1b. STREET ADDRESS OF OWNER: 4000 Town Center, Suite 2000 1c. CITY OF OWNER: Southfield		Lafarge Midwest, Inc.			
		2b. STREET ADDRE	SS OF OPERATOR:		
		2150 E. 130th Stre	eet		
		2c. CITY OF OPERA	TOR:		
		Chicago			
1d. STATE OF OWNER:	1e. ZIP CODE:	2d. STATE OF OPER	RATOR:	2e. ZIP CODE:	
Michigan	48075	Illinois 60633			
3a. NAME OF CORPORATE DIVISION Lafarge Midwest, Inc.	NOR PLANT:	3b. STREET ADDRE 2150 E 130 th Stree	SS OF EMISSION S	OURCE:	
3c. CITY OF EMISSION SOURCE: Chicago	3d. LOCATED WITHIN CITY LIMITS:X YES NO	3e. TOWNSHIP: N/A	3f. COUNTY: Cook	3g. ZIP CODE: 60633	
4. ALL CORRESPONDENCE TO: (TI	TLE AND/OR NAME OF INDIVIDUAL)	5. YOUR DESIGNA	TION FOR THIS API	PLICATION: (C)	
Michael Pelan		<u>SLAGG</u>	<u>rind</u>		
6. ADDRESS FOR CORRESPONDE	NCE: (CHECK ONLY ONE)	7. WHO IS THE PERMIT APPLICANT?			
	EMISSION SOURCE		OPERATOR		

	ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL PI APPLICATION REMAINS TRUE, CORRECT AND CURRENT. BY AFFI CERTIFIES THAT HE/SHE IS AUTHORIZED TO EXECUTE THIS APPL	REVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS IXING HIS/HER SIGNATURE HERETO THE UNDERSIGNED FURTHER LICATION.
	AUTHORIZED SIGNATURE(S): (D) BY BY BY DATE	
1	Robert A. Fiolek	
	TYPED OR PRINTED NAME OF SIGNER	TYPED OR PRINTED NAME OF SIGNER
	Vice President	
	TITLE OF SIGNER	TITLE OF SIGNER'A - DAPC - SPFLD
(A)	THIS FORM IS TO PROVIDE THE ILLINOIS EPA WITH GENERAL INF OPERATED. THIS FORM MAY BE USED TO REQUEST A CONSTRU- CONSTRUCTION AND OPERATING PERMIT.	ORMATION ABOUT THE EQUIPMENT TO BE CONSTRUCTED OR CTION PERMIT, AN OPERATING PERMIT, OR A JOINT
(B)	ENTER THE GENERIC NAME OF THE EQUIPMENT TO BE CONSTRU WHICH MAY BE ISSUED PURSUANT TO THIS APPLICATION. THIS A AND INFORMATION.	JCTED OR OPERATED. THIS NAME WILL APPEAR ON THE PERMIT FORM MUST BE ACCOMPANIED BY OTHER APPLICABLE FORMS
(C)	PROVIDE A DESIGNATION IN ITEM 5 ABOVE WHICH YOU WOULD L EQUIPMENT. YOUR DESIGNATION WILL BE REFERENCED IN CORF APPLICATION. YOUR DESIGNATION MUST NOT EXCEED TEN (10)	IKE THE ILLINOIS EPA TO USE FOR IDENTIFICATION OF YOUR RESPONDENCE FROM THIS AGENCY RELATIVE TO THIS CHARACTERS. (OPTIONAL)
(D)	THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WITH 35 IL APPLICATIONS AND SUPPLEMENTS THERETO SHALL BE SIGNED I AIR POLLUTION CONTROL EQUIPMENT, OR THEIR AUTHORIZED A AUTHORITY TO SIGN THE APPLICATION."	L. ADM. CODE 201.154 OR 201.159 WHICH STATES: "ALL BY THE OWNER AND OPERATOR OF THE EMISSION SOURCE OR GENT, AND SHALL BE ACCOMPANIED BY EVIDENCE OF
	IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH CORPO COPY OF A RESOLUTION OF THE CORPORATION'S BOARD OF DIR APPLICATION TO CAUSE OR ALLOW THE CONSTRUCTION OR OPE	RATION MUST HAVE ON FILE WITH THE ILLINOIS EPA A CERTIFIED RECTORS AUTHORIZING THE PERSONS SIGNING THIS RATION OF THE EQUIPMENT TO BE COVERED BY THE PERMIT.

BILLING INFORMATION			10. CONTACT PERSON FOR APPLICATION:					
	ME:	11. C	II <u>Chael Pelan</u> ONTACT PERSON'S TEL	EPHONE NUMBER:				
Lafarge Midwes	it, Inc.	248-948-1151						
9b. STREET ADDRESS:		12. C	ONTACT PERSON'S FA(18-354-7648					
9c. CITY:		13. FE	EDERAL EMPLOYER IDE	ENTIFICATION NUMBER (FEIN):				
Southfield		58	3-1290226					
9d. STATE: Michigan	9f. BILLING CONTACT PERSON: Michael Pelan	14. PI	RIMARY STANDARD IN: 2	SUSTRIAL CLASSIFICATION (SIC) CATEGORY				
9e. ZIP CODE:	9g. CONTACT TELEPHONE NO .:	15. Pi	RIMARY SIC NUMBER:	16. TAXPAYER IDENTIFICATION NUMBER (TIN):				
48075	248-948-1151	32	241	58-1290226				
17. DOES THE APPLICATION CONTAIN A PLOT PLAN/MAP: [X] YES NO IF THE PLOT PLAN/MAP HAS PREVIOUSLY BEEN SUBMITTED, SPECIFY: I. D. NO.:								
PRACTICE.	X YES NO		. ,					
19. IS THE EMISS IF "YES", PRO	ION UNIT COVERED BY THIS APPLICAT VIDE THE DATE CONSTRUCTION WAS	ION ALF	READY CONSTRUCTED'	? YES X NO				
20. IF THIS APPLI INFORMATION	20. IF THIS APPLICATION INCORPORATES BY REFERENCE A PREVIOUSLY GRANTED PERMIT(S), HAS FORM APC-210, "DATA AND INFORMATION-INCORPORATION BY REFERENCE" BEEN SUBMITTED?							
	21. DOES THE STARTUP OF AN EMISSION UNIT COVERED BY THIS APPLICATION PRODUCE AIR CONTAMINANT EMISSIONS IN EXCESS OF APPLICABLE STANDARDS? ☐ YES NO IF "YES", HAS FORM APC-203, "OPERATION DURING STARTUP" BEEN COMPLETED FOR THIS UNIT? ☐ YES NO							
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0 23. IS AN	EMISSION UNIT COVERED BY THIS AF	PLICATI	ON SUBJECT TO A FUT	URE COMPLIANCE DATE?				
	ES X NO S", HAS FORM APC-202, "COMPLIANCE " "ES NO	PROGR	AM & PROJECT COMPL	ETION SCHEDULE" BEEN COMPLETED FOR THIS				
24. DOES DI EPISC EVISC	THE SOURCE COVERED BY THIS APP DDE ACTION PLANS)? YES X NO	LICATIO	N REQUIRE AN EPISOD	DE ACTION PLAN (REFER TO GUIDELINES FOR				
25. LIST AND IDEI PAGE NUMBE See "Supplemen	NTIFY ALL FORMS, EXHIBITS, AND OTH RS OF EACH ITEM (ATTACH ADDITION stal Forms and Information Listing" Page 3.	IER INFO	ORMATION SUBMITTED ITS IF NECESSARY):	AS PART OF THIS APPLICATION. INCLUDE THE				
				TOTAL NUMBER OF PAGES				

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Lafarge Midwest, Inc.

Project Description - Slag Processing Project

İtem	Page
APC 20 Form	1
Supplementary Forms and Information Listing	3
Project Overview	4
Operational Concept	4
Project Scope	5
Equipment Specifications	6
Physical Data and Additional Submissions	6
Applicable Regulatory Provisions	6
Anticipated Permit Conditions	7
Table 1	8
Plot Plan	9
Process Flow Diagram 1	10
Process Flow Diagram 2	11
Process Rates for Emission Analyses	12
Table 2	13
Emission Factors	14
Table 3	17
Table 4	18
APC 220 Form – Unloading Slag Trucks to Hopper	19
APC 220 Form – Wet Slag –Hopper to Conveyor	22
APC 220 Form – Transfer of Wet Slag to Storage	25
APC 220 Form – Wet Slag from Storage to Dryer	28
APC 220 Form – Slag Dryer	31
APC 220 Form – Ball Mill	34
APC 220 Form – High Efficiency Separator	37
APC 220 Form – Dry Slag Storage Bin	40
APC 220 Form – Barge Unloading	43
APC 220 Form – Cement Silos	46
APC 220 Form – Intermediate Surge Bin	49
APC 220 Form – Truck Loading	52
APC 220 Form – Barge Loading	55
APC 220 Form – Ship/Vessel Loading	58
APC 260 Form – Surge Bin Dust Collector	61
APC 260 Form - Ship/Vessel Loading Dust Collector	64
APC 260 Form - Barge Loading Dust Collector	67
APC 260 Form - Slag Storage Bin Dust Collector	70
APC 260 Form - Slag Dryer Dust Collector	73
APC 260 Form - Ball Mill Dust Collector	76
APC 260 Form - HES Dust Collector	79
APC 232 Form - Grinding Aid Tank	82
Grinding Aid Emission Simulation Results	84
Grinding Aid MSDS	87

Supplemental Forms and Information Listing

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Project Description - Slag Processing Project

August 2000

Project Overview

Lafarge Midwest, Inc. is proposing to construct and operate a slag processing operation and modify the existing terminal by adding barge and ship loading capabilities at the South Chicago Terminal site, which is located on the Calumet River at 2150 E. 130 Street.. When the project is completed, the terminal site will have the capability to receive, handle, and dry up to 850,000 tons of wet granulated blast furnace slag. New equipment will also be installed to provide the ability to load cement and dry ground slag into barges and ships.

The dried slag will be ground in a ball mill, stored, and loaded out to trucks, barges and ships. Lafarge intends to produce a maximum of 744,600 tons per year of dry ground slag at the South Chicago site. The total throughput for the existing silos will remain at the currently permitted capacity of 1,600 tons per hour (14,016,000 tons per year), with as much as 744,600 tons per year being dried ground slag. The truck loadout capacity will also remain at the permitted level of 880 tons per hour (7,710,000 tons per year). The capacity of the ship loading system will be 600 tons per hour (5,256,000 tons per year). The capacity of the barge loading system will be 500 tons per hour (4,380,000 tons per year).

Granulated blast furnace slag is a byproduct of steel manufacturing facilities. It is created in a granulator at the foot of a blast furnace. In the granulator, molten slag is injected into a water spray bath to fracture the slag into granules and cool the slag. Granulated slag produced by the steel industry is wet and has the consistency of a coarse sand. Because of the chemical and physical properties of this slag (high silica, calcium, alumina and magnesium content), and the case of grinding slag to a fine powder in ball mills, it is commonly used as an additive in several types of cement.

Operational Concept

The wet granulated blast furnace slag will be transported to the terminal in trucks. The anticipated source of the slag is a nearby steel plant, which ensures that the slag will be received in a wet state. The typical moisture content of the slag will be approximately 12 percent. When received, the slag will be dumped into a 30-ton hopper (M01) from the haul trucks. The hopper will feed the wet granulated slag onto a conveyer belt system that will transfer the material into a 1,000-ton day bin. From the day bin, the slag will travel across a weigh belt (N02) and onto the dryer feed belt (N03), which will transfer the slag into the feeder for the dryer. See Process Flow Diagram 1.

The slag will be partially dried in a co-flow shaft dryer that will be fired with natural gas. Exiting the dryer, the slag will be separated from the gas stream by a cyclonic separator (N08). The particulate matter in the gas stream exiting the cyclone will be collected with the use of a fabric filter dust collector (DC10).

Project Description - Slag Processing Project

August 2000

The partially dried slag will travel down through an enclosed tube into a ball mill (N17), where it will be ground to the consistency of cement. The heat generated by the grinding process will be utilized to finish drying the slag to the desired moisture content of approximately 0.1 percent. The gaseous exhaust from the ball mill will be vented through a fabric filter (DC11) and discharged to the atmosphere. The ground dry slag will be conveyed via two gravity air slides (N21, N23) and a bucket elevator (N22) to a high efficiency separator (N24). The high efficiency separator will remove any oversized slag particles from the product stream. The oversized particles will be fed via a gravity air slide (N27) back to the ball mill. The finished slag will be discharged from the separator and collected in the separator vent dust collector (DC12), which is a fabric filter.

From the separator vent dust collector, the finished slag will be transferred via an air slide (N29) to a pneumatic pump (P01) that will be used to pneumatically convey the finished slag to an 8,000-ton storage tank (ST10). Particulate matter emissions created by transfer into ST10 will be controlled by a fabric filter dust collector (DC9).

The finished slag will be transferred from the 8,000-ton storage tank (ST10) via air slide to a 500-ton surge bin (SB01), in a manner similar to the gravity loading of trucks and barges. See Process Flow Diagram 2. Particulate matter emissions created by loading into the surge bin will be controlled by ventilating the headspace in the bin to a fabric filter dust collector (DC6). The surge bin will be used to feed slag to a new ship loadout system (VL01) or to the existing perimeter storage silos.

Cement and dry ground slag stored in the existing silos may be loaded into enclosed tanker trucks via the existing system, or into barges or ships via the new loadout systems. Loading into trucks will be done via existing aeration bins and air slides. The air slides transfer the material to the loading chutes that direct the material into the trucks by gravity. Particulate matter emissions created by the loading into tanker trucks will continue to be controlled by ventilating each air slide and an annular space provided in each chute to a fabric filter dust collector (DC3, DC4).

Cement and dry ground slag stored in the existing silos may also be loaded to barges via a new air slide (AS3), or pneumatically into ships via surge bin (SB1) and the new ship loadout system (VL01). Particulate matter emissions created by gravity loading into barges will be controlled by ventilating the air slide and an annular space provided in the chute to a fabric filter dust collector (DC8). Particulate matter emissions created by loading into ships will be controlled by the surge bin fabric filter dust collector (DC6) and the new ship loadout system fabric filter collector (DC7).

Project Scope

The scope of the project will require the construction of the entire slag handling and processing operation as well as barge and ship loading facilities. The project will require

Project Description – Slag Processing Project

August 2000

the construction of all necessary equipment, buildings and physical plant requirements for the processing of the slag.

Equipment Specifications

Lafarge has not completed the process of selecting the specific slag dryer, ball mill and peripheral equipment that will be installed during the project. New equipment will include a slag dryer, a ball mill with a high efficiency separator, material handling and conveying equipment, process dust collectors, and all necessary buildings, foundations, structures and services. A storage tank with ancillary piping and pumping equipment will be installed to hold and supply a liquid grinding aid that will be used in the ball mill.

For the purposes of this Construction Permit Application, the essential equipment specifications for the slag dryer are the maximum burner heat input capacity of 45 gj/hr (43 MMBtu/hr), a generation rate of less than or equal to 132 pounds of nitrogen oxides (NO_x) per million cubic feet of natural gas, and a maximum finished slag production rate of 744,600 tons per year. The burner will be fired with pipeline grade natural gas. The natural gas is expected to have a nominal heating capacity of 1000 Btu per cubic foot.

The capacity of the fabric filters used to collect particulate emissions is presented on the attached APC 260 forms.

The day bin will have a capacity of 1,000-tons. The finished storage bin will have a capacity of 8,000-tons. The surge bin used to load material into ships or transfer slag to the perimeter silos has a capacity of 500 tons.

The essential specifications for the grinding aid storage tank with regard to this construction permit are: a horizontal fixed roof 10,000-gallon atmospheric tank.

The ship loading system will be capable of loading 600 tons per hour. The barge loading system will be capable of loading 500 tons per hour.

Physical Data and Additional Submissions

The information provided for the slag dryer, ball mill, loading systems and peripheral equipment on Forms APC-220 and APC-260 of this Construction Permit Application reflect Lafarge's best engineering estimates and vendor-supplied documentation. Lafarge will provide IEPA with the dimensions, performance specifications, manufacturer's identity, model numbers and serial numbers as soon as practical after the equipment selection is complete.

Applicable Regulatory Provisions

The provisions of <u>35 IAC 214.301</u> will limit the SO2 concentration in the slag dryer exhaust to no greater than 2000 ppm.

Project Description - Slag Processing Project

August 2000

The requirements of <u>35 IAC 212.321</u> will be applicable to the slag dryer, the ball mill and the high efficiency separator. The particulate emissions will be limited in relation to the process throughput rate of each.

The provisions of <u>35 IAC 212.421</u> will limit the visible emissions from each of the process vents to no more than 10 percent opacity.

The requirements of <u>35 IAC 203 Subpart C - REQUIREMENTS FOR MAJOR</u> <u>STATIONARY SOURCES IN NONATTAINMENT AREAS</u> will not apply because the project does not constitute the construction of a major source, nor is it a major modification.

Anticipated Permit Conditions

Lafarge anticipates that the Construction Permit issued by IEPA in response to this application will limit specific throughput and emission rates. Table 1 presents the limits for the existing operation and proposed limits for the new operation. The new limits will appropriately establish the bounds within which the terminal can operate, while maintaining emissions at less than significant levels, and maintaining compliance with applicable air pollution regulations. The emission estimates, and proposed limits, for the existing portion of the terminal are based upon the same emission factors used in the existing permit. The control efficiency for the fabric filters has been reduced from 99.9%, which was used in the existing permit, to 99%. This lower efficiency is a more achievable control efficiency, and still ensures compliance with all emission limits.

Project Description - Slag Processing Project

August 2000

	Mater	ial Usage	Operating Hours	ing PM Emiss s (current pe		ssion PM Emi ermit) (new pe	
Item of Equipment	(tph)	(tpy)	(h/y)	(lb/mo) ²	(tpy)	(lb/mo)	(tpy)
Cement Silo Unloading	1,600	14,016,000	8,760	380	1.90	3.214	18.92
Truck Loading/Unloading	880	7,710,000	8,760	88	0.44	134	0.77
Barge Unloading	320	2,803,200	8,760	754	3.77	643	3.78
Wet Slag Processing	300 ³	850,000	8,760	-		305	0.77
Dry Slag Processing	85	744,600	8,760			3,586	21.11
Barge Loading	500	4,380,000	8,760			74	0.44
Ship/Vessel Loading⁴	600	5,256,000	8,760			1,295	7.63
Total Emissions from Terminal:				1,222	6.11	9,251	53.42

Table 1. Existing and Proposed Permit Limits

¹ The new PM emission limits for Cement Silo Unloading and Truck Loading/Unloading are the result of a decrease in the dust collector removal efficiency from 99.9% to 99%. ² The new monthly emissions limits are based upon the maximum hourly emission rate at 744 hours per

month.

³ Some individual operations are limited to 100 tons per hour.

⁴ The annual throughput includes product transfers through the surge bin (SB1) to the silos and to ship loading (SL1). Controls are DC6 for the surge bin and DC7 for the ship loading.

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September 5, 2000

RECEIVED SEP 07 2000 LEPA - DAPC - SPFLD

Mr. John Blazis Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section 1021 North Grand Avenue East Springfield, Illinois 62794-9276

RE: Lafarge Midwest, Inc. – South Chicago Terminal; ID No. 031600FHQ Correction to the Application for Modification to Construct Slag Processing, and Barge and Ship Loadout Facilities

Dear Mr. Blazis:

It is Lafarge Midwest's understanding that our application to modify the existing operations at the South Chicago Terminal site located at 2150 E. 130th Street in Chicago has been assigned to you. We look forward to working with you on this modification.

We would like to bring one minor correction to your attention. The primary SIC code listed in APC 200, box 15 is 3241. This SIC code is for portland cement manufacturing facilities. The current SIC code for the cement terminal operations is 5032. The SIC code for the proposed new slag processing operations is 3295. The changes to the barge and ship loadout facilities are related to the terminal operations and should remain as SIC code 5032. Therefore, we are uncertain if the "primary" SIC code on this form should be listed as 5032 or 3295, for this modification. In either case, the SIC code of 3241 in the current application is incorrect.

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Please contact me at (248) 948-1151 to clarify this issue. If an amended APC 200 form is needed, let us know and we will provide it.

Sincerely,

LAFARGE CORPORATION

"ichan

Michael L. Pelan Regional Environmental Manager

File Copy

CEMENT GROUP/U.S. OPERATIONS P.O. Box 887, Southfield, MI 48037 Office: (248) 354-9050 Fax: (248) 354-0039

Project Description - Slag Processing Project

August 2000

Process Rates for Emission Analysis

The estimated maximum annual emissions from the slag handling, processing, storage and loading operations and the cement handling, storage and loading operations are presented in Table 2. The estimated emissions represent the expected emissions that will result at the maximum annual finished slag production rate of 744,600 tons and a maximum of throughput for the silos and loading systems, based upon their individual hourly capacities.

To produce the maximum possible quantity of finished slag, receipt of up to 850,000 tons of wet granulated blast furnace slag will be required. The difference in process throughputs is the result of removing the water from the granulated slag.

The emission estimates for the loading of material into the storage silos is calculated with a throughput of 1600 tons of material per hour for 8760 hours per year. This includes portland cement and slag.

The emission estimates for the truck loading and unloading is calculated with a throughput of 880 tons of material per hour for 8760 hours per year. This includes portland cement and slag.

The emission estimates for unloading portland cement from barges is calculated with a throughput of 320 tons of material per hour for 8760 hours per year.

The emission estimates for the loading of material into barges is calculated with a throughput of 500 tons of material per hour for 8760 hours per year. This includes portland cement and slag. Annual quantity of material loaded onto barges to 4,380,000 tons,

The emission estimates for the loading of material into ships is calculated with a throughput of 600 tons of material per hour for 8760 hours per year. This includes portland cement and slag. Annual quantity of material loaded into ships to 5,256,000 tons.

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l able 2.
Estimated Maximum Annual Emissions for Proposed Slag Processing Project

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	Estimated Annual Emissions (tons/yr)									
Operation	PM	PM-10	SO _x	NOx	co	VOM				
Cement Silo Loading	18.92	14.02								
Truck Loading Unloading	0.77	0.77								
Barge Unloading	3.78	2.80								
Wet Slag Processing	0.77	0.36								
Dry Slag Processing	21.11	10.49	1.23	24.86	20.85	18.99				
Barge Loading	0.44	0.44								
Ship/Vessel Loading	7.63	5.79								
Total	53.42	34.67	1.23	24.86	20.85	18.99				

Page13 / 94

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Project Description - Slag Processing Project

August 2000

Emission Factors

With one exception, all of the emission factors used to calculate estimated emissions are from AP-42 or AIRS. The factors used are for the process operations that are most representative of the proposed slag operations. The emission factor used for NO_x generated by the combustion of natural gas in the slag dryer is based upon a contractually required vendor guarantee.

• Unprocessed Slag Handling

The air emissions from the slag receiving and conveying operations will be in the form of particulate matter. The emissions will result from material transfers. AP-42, Section 13.2.4 (Aggregate Handling and Storage Pile) is used to determine the emission factors for the transfer operations.

For continuous or batch drop operations, the emission factor for PM and PM-10 is calculated using Equation 1^3 :

$$E = 0.0032k \frac{\left(\frac{\upsilon}{3}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}};$$

Equation 1

where: E= emission factor (lb/ton),

k= particle size multiplier (1.0 for PM, and 0.35 for PM-10),

U= mean wind speed, miles per hour (mph), and

M=material moisture content (weight percent).

In equation 1, the mean wind speed is calculated to be 10.39 mph^6 for outside transfer points. The average wind speed for the transfer from the receiving hopper to the first, belt which occurs underground, is calculated to be one (1) mph or less. A value of one (1) mile per hour is used in that case. The moisture content of the unprocessed slag is expected to range from ten to twelve percent. Ten percent moisture is used for the calculations.

⁵ AP-42, Section 13.2.4

⁶ USEPA Tanks 4.0 – Average wind speed for Chicago

Project Description - Slag Processing Project

August 2000

For belt transfer points that are enclosed with covers, chutes and hoods, the reduction in particulate matter generated is estimated to be at least 50 percent. In such cases, the emission estimated are 50 percent of the amount that would have been estimated for a transfer with no cover, chute of hood. The emission factors and emission estimates are shown in Table 3.

• Slag Drying

For emissions estimates from the slag drying operations, the emissions factors for the natural gas fired rotary dryer with fabric filter presented in AP-42, Section 11.1 (Hot Mix Asphalt Plants)⁷ are used to estimate the carbon monoxide, sulfur dioxide, particulate matter, PM-10, and VOM emissions. Those factors are presented in Table 4.

A more conservative emission factor is used for the NO_x emissions. Lafarge is requiring equipment vendors to provide a performance guarantee limiting the NO_x generation to no more than 130 pounds per million cubic feet of natural gas combusted.

• Slag Grinding and Size Classification

The process is completely enclosed from the ball mill forward. All gaseous effluent from this section of the process passes through fabric filters prior to being discharged to the atmosphere. The basis for the estimate of particulate emissions from the fabric filters on the ball mill and the high efficiency separator is AP-42 Section 11.6 (Portland Cement Manufacturing)⁸ for finish grinding mills with fabric filters and finish grinding mill separators with fabric filters.

Cement Unloading And Dry Slag Pneumatic Transfer to Silos and Ships

For emissions estimates from transfer of cement from trucks and barges to silos, for transfer of dried slag to silos, and for transfer of slag and cement to ships the emissions factor (0.27 lb/ton) for cement unloading to elevated bins presented in AP-42, Section 11.12 (Concrete Batching)⁹ is used to estimate the particulate matter emissions. AP-42 does not present a PM-10 factor. An USEPA/AIRS emission factor (0.2 lb/ton) for cement loadout is used to calculate the PM-10 emission rate. The silo loading operations are controlled by fabric filters. The overall control efficiency is estimated at 99%. The emission factors presented in Table 3 are on a controlled basis.

Cement and Slag Gravity Loadout to Trucks, Barges, and the Surge Bin

For emissions estimates from gravity loading cement and slag into trucks and barges and the surge bin, the emissions factor (0.02 lb/ton) for cement truck loading presented in AP-

⁷ AP-42, 1/95 Table 11.1-5, Table 11.8

⁸ AP-42, 1/95 Table 11.6-4

⁹ AP-42, 10/86 Table 11.12-2

Project Description - Slag Processing Project

August 2000

42, Section 11.12 (Concrete Batching)¹⁰ is used to estimate the particulate matter emissions. No PM-10 emission factor is presented in AP-42, Section 11.12. A conservative assumption is made here, for the purpose of estimating emissions, that all of the particulate is PM-10. The emission factors presented in Table 3 are on a controlled basis.

• Grinding Aid

USEPA's program Tanks 4.0 is used to estimate the emissions from the grinding aid storage tank. The solution is assumed ideal. The programs default values are used for the tank head dimensioning, color and condition. Chicago meteorological data included in the model is used.

¹⁰ AP-42, 10/86 Table 11.12-2

		r		r									
					Maximum Process	Controlled PM		Maximum Short-Term	Typical Short-Term	Maximum	Maximum Short-Term	Typical Short-Term	Maximum Annual
			Maximum	Maximum	Throughput	Emission	Controlled PM-	PM	PM	PM	PM-10	PM-10	PM-10
Emission		Control	Throughput	Throughput	Rate	Factor	10 Emission	Emissions	Emissions	Emissions	Emissions	Emissions	Emissions
Point	Description	Device	(tons/hr)	(lbs/hr)	(tons/yr)	(lb/ton)	Factor (lb/ton)	(lbs/hr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(lbs/hr)	(tons/yr)
					Wet	Portion of Slag	Process	· · · · ·	<u> </u>				
M 01	Unloading Hopper	None	300	600,000	850,000	0.00050	0.00024	0.15	0.12	0.21	0.07	0.056	0.10
M 02	Hopper Belt	None	300	600,000	850,000	0.000024	0.000011	0.01	0.01	0.01	0.003	0.003	0.01
M 03	Day Bin Feed Belt	None	300	600,000	850,000	0.00025	0.00012	0.08	0.06	0.11	0.04	0.032	0.05
N 01	Day Bin	None	300	600,000	850,000	0.00025	0.00012	0.08	0.06	0.11	0.04	0.032	0.05
N 02	Day Bin Weigh Belt	None	100	200,000	850,000	0.00025	0.00012	0.03	0.02	0.11	0.01	0.008	0.05
N 03	Dryer Feed Belt	None	100	200,000	850,000	0.00025	0.00012	0.03	0.02	0.11	0.01	0.008	0.05
N 06	Dryer Feeder	None	100	200,000	850,000	0.00025	0.00012	0.03	0.02	0.11	0.01	0.008	0.05
					Dry F	Portion of Slag F	rocess						
N 07	Slag Dryer	DC10	85	170,000	744,600	0.018	0.0082	1.53	1.22	6.70	0.70	0.56	3.05
N 17	Ball Mill	DC11	85	170,000	744,600	0.008	0.004	0.68	0.54	2.98	0.34	0.27	1.49
N 24	HES Collector	DC12	85	170,000	744,600	0.028	0.014	2.38	1.90	10.42	1.19	0.95	5.21
ST10	Slag Storage Tank 10	DC9	85	170,000	744,600	0.0027	0.002	0.23	0.18	1.01	0.17	0.14	0.74
		_			Silos a	and Loading Op	erations						
SL1	Silo Loading	DC1	1600	3,200,000	14,016,000	0.0027	0.002	4.32	3.46	18.92	3.20	2.56	14.02
SB1	Intermediate Surge Bin	DC6	600	1,200,000	5,256,000	0.0002	0.0002	0.12	0.10	0.53	0.12	0.10	0.53
TL1/TUL1	Truck Loading/Unloading 1	DC3, DC4	880	1,760,000	7,708,800	0.0002	0.0002	0.18	0.14	0.77	0.18	0.14	0.77
BUL1	Barge Unloading	DC5	320	640,000	2,803,200	0.0027	0.002	0.86	0.69	3.78	0.64	0.51	2.80
BL1	Barge Loading	DC8	500	1,000,000	4,380,000	0.0002	0.0002	0.10	0.08	0.44	0.10	0.08	0.44
VL1	Ship/Vessel Loading	DC7	600	1,200,000	5,256,000	0.0027	0.002	1.62	1.30	7.10	1.20	0.96	5.26
							Total Emiss	ions from Term	inal (tons/yr):	53.42			34.67

Table 3. Estimated Particulate Emissions from Slag Processing Project

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IEPA-DIVISION OF RECORDS MANAGEMENT RELEASABLE

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Table 4. Estimated Emissions from Dry Slag Processing -Drying Operations-

		Emission			Maximum	Typical Short-		Maximum
		Factor/	Maximum	Typical	Short-Term	Term	Maximum	Annual
	Emission	Throughput	Hourly	Hourly	Emissions	Emissions	Annual	Emissions
Pollutant	Factor	Units	Throughput	Throughput	(lbs/hr)	(lb/hr)	Throughput	(tons/yr)
Emission Fa	ctor Source	: AP-42 Section	11.1 Asphalt I	Rotary Dryer, e	except for NO _x w	hich is performa	nce guarantee.	
РМ	0.018	tons	85	68	1.53	1.22	744,600	6.70
PM-10	0.0082	tons	85	68	0.70	0.56	744,600	3.05
SOx	0.0033	tons	85	68	0.28	0.22	744,600	1.23
CO	0.056	tons	85	68	4.8	3.8	744,600	20.85
VOM	0.051	tons	85	68	4.34	3.47	744,600	18.99
NO _x	132	MM ft ³	0.043	0.034	5.68	4.49	376.7	24.86

Page 18 /94

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STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page 19 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GENER	RAL INFORMATION
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: Truck Unfoading Wet Slag to Hopper
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
 10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: M 01 11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR P ANOTHER APPLICATION, IDENTIFY THE APPLICATION): 	REMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

 COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION

CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE
AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD. AS REPRESENTED BY AVERAGE OPERATING
TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.
This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

R 010967

Page 20 of 94

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RAW	MATERIAL INFORM	IATION		4
NAME OF RAW MATERIAL	PEI	AVERAGE RATE R IDENTICAL SOURCE	PEI	MAXIMUM RATE R IDENTICAL SOURCE
20a. Wet Blast Furnace Slag	b.	480.000 LB/HR	c.	600,000 LB/HR
21a.	b.	LB/HR	c.	LB/HR
22a.	b.	LB/HR	с.	LB/HR
23a.	b.	LB/HR	c.	LB/HR
24a.	b.	I_B/HR	c.	LB/HR

PRODUCT INFORMATION						
NAME OF PRODUCT	A\ PER ID	AVERAGE RATE MAXIMUM RA PER IDENTICAL SOURCE PER IDENTICAL SO				
30a. N/A	b.	N/A c. LB/HR	N/A LB/HR			
31a.	b.	LB/HR c.	LB/HR			
32a.	b.	c. LB/HR	LB/HR			
33a.	b.	c. LB/HR	LB/HR			
34a.	b.	c. LB/HR	LB/HR			

WASTE MATERIAL INFORMATION						
NAME OF WASTE MATERIAL	PE	AVERAGE RATE MAXIMUM R. PER IDENTICAL SOURCE PER IDENTICAL S				
40a. N/A	Ъ.	N/A LB/HR	с.	N/A LB/HR		
41a.	b.	LB/HR	¢,	LB/HR		
42a.	b.	LB/HR	¢.	LB/HR		
43a.	b.	LB/HR	c.	LB/HR		
44a.	b.	LB/HR	C.	LB/HR		

		*	FUEL USAGE	INFORMATION			
FUEL USED			Τ١	/PE		HEAT CONTENT	
50a NATURAL GAS		b.			С.	1000 BTU/SCF	
OTHER GAS							BTU/SCF
OIL					Ţ		BTU/GAL
COAL							BTU/LB
OTHER							BTU/LB
d. AVERAGE FIRING RATE PE	R IDENTICAL SOL	JRCE:		e. MAXIMUM FIRING	RATE	PER IDENTICAL SOURCE:	
			BTU/HR	<u> </u>			BTU/HR

THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

R 010968

Page 21 of CI4

•EMISSION INFORMATION 51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

				AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTR SOURCE	ATION <u>OR</u> EMISS	SION R	ATE PER IDE	ENTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52 a .	GR/SCF	b.	0.12	LB/HR	c. AP-42, Section 13.2.4
CARBON MONOXIDE	53a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	b.	<u>. </u>	LB/HR	с.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	56a.	PPM (VOL)	Ь.		LB/HR	с.
••OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.06	LB/HR	c. AP-42, Section 13.2.4 -(PM-10)
				MAXIMUN	1 OPERATIO	DN
CONTAMINANT	CONCENTR SOURCE	ATION <u>OR</u> EMIS	SION R	ATE PER ID	ENTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.15	LB/HR	c. AP-42, Section 13.2.4
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	¢.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	.07	LB/HR	c. AP-42. Section 13.2.4 -(PM-10)

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*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT. ***OTHER** CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

*****EXHAUST POINT INFORMATION**

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: N/A Fugitive Emissions

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): N/A

66. EXIT HEIGHT ABOVE GRADE: N/A	67. EXIT DIAMETER: N/A
68. GREATEST HEIGHT OF NEARBY BUILDINGS: Cement Silos	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 50
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: N/A °F	72. EXIT GAS TEMPERATURE: N/A °F
71. GAS FLOW RATE THROUGH EACH EXIT: N/A ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: N/A ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE. EAST SPRINGFIELD. ILLINOIS 62702

Page 22 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

"THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Latarge Midwest. Inc	OWNER): Lafarge Midwest, Inc
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GEN	ERAL INFORMATION
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: Wet Slag Hopper to Conveyor Belt
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: N 02	
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	VPREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS. ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS					
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE					
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:					
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.					
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD. DIVIDED BY THE					
AVERAGE OPERATING TIME.					
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING					
TIME AND AVERAGE RATES.					
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST					
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:					
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.					
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.					
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.					
This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required					
under that Section. Failure to do so more rewart this form from being processed and could excut in your particular being denied. This form has been approach by					

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

R 010970

			· · ·		Page 23 of 94
	RAW	MATERIAL INFO	RMATION		
	NAME OF RAW MATERIAL		AVERAGE RATE PER IDENTICAL SOURCE	Р	MAXIMUM RATE ER IDENTICAL SOURCE
20a. Stag Cement		b.	480.000 LB/H	c.	600.000 LB/HR
21a.		b.	LB/H	c. R	LB/HR
22a.		b.	LB/H	c. R	LB/HR
23a.		b.	LB/H	R C.	LB/HR
24a.		þ.	LB/H	R C.	LB/HR

		PRODUCT INFORMATION		· · ·	
	NAME OF PRODUCT	AVI PER IDE	ERAGE RATE	MAXIMUM RATE PER IDENTICAL SOURCE	
30a. N/A	······································	Ъ.	N/A c LB/HR	z. N/A	LB/HR
31a.		b.	c LB/HR	2.	LB/HR
32a.		b.	LB/HR	2.	LB/HR
33a.		b.	c LB/HR	C.	LB/HR
34a.		ь.	LB/HR	c.	LB/HR

WASTE MATERIAL INFORMATION						
NAME OF WASTE MATERIAL	PE	AVERAGE RATE R IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE			
40a. N/A	b.	N/A LB/HR	c.	N/A LB/HR		
41a.	b.	LB/HR	с.	LB/HR		
42a.	b.	LB/HR	c.	LB/HR		
43a.	b.	LB/HR	с.	LB/HR		
44a.	b.	LB/HR	с.	LB/HR		

•FUEL USAGE INFORMATION						
FUEL USED		ТҮРЕ			HEAT CONTENT	
50a. NATURAL GAS		b			c. 1000 BTU/SCF	
OTHER GAS						BTU/SCF
OIL						BTU/GAL
COAL						BTU/LB
OTHER						BTU/LB
d. AVERAGE FIRING RATE PER IDENTICAL SOURCE:				e. MAXIMUM FIRING RATE PER IDENTICAL SOURCE:		
BTU/HR						BTU/HR
*THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAŠ IN A DRYER, OR COAL						

IN A MELT FURNACE.
*EMISSION INFORMATION

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

				AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION R.	ATE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b.	0.01	LB/HR	c. AP-42. Section 13.2.4
CARBON MONOXIDE	53a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.003	LB/HR	c. AP-42, Section 13.2.4 (PM-10)
	<u> </u>		<u>.</u>	MAXIMUN	4 OPERATIC	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION R	ATE PER IDE	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.01	LB/HR	c. AP-42, Section 13.2.4
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	C
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIĐE	62a.	PPM (VOL)	b.	· _ ·	LB/HR	C.
**OTHER (SPECIEY)	63a.	PPM (VOL)	b.	0.003	LB/HR	c. AP-42, Section 13.2.4 (PM-10)

 ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 "OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

*****EXHAUST POINT INFORMATION**

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: N/A (Fugitive)

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. ÉXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
A VERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE:	72. EXIT GAS TEMPERATURE:
ob	۰۲ ۲
71. GAS FLOW RATE THROUGH EACH EXIT:	73. GAS FLOW RATE THROUGH EACH EXIT:
ACFM	ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

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STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE. EAST SPRINGFIELD, ILLINOIS 62702

Page <u>25</u> of <u>94</u>

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GENI	ERAL INFORMATION
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: Transfer of Wet Slag to Storage
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: M 03, N 01	
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

 COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS. ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION

CONTROL EQUIPMENT.

OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS." APC-201.

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE. OR THE GENERAL STATE
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD. DIVIDED BY THE
AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING
TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.
The second s
This Agency is authorized to require this information under Himois Revised Statutes, 1979, Unapter 111 172, Section 1039. Disclosure of this information is required

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Page a le of 94

RAW	MATERIAL INFORMATION		· · · · · · · · · · · · · · · · · · ·
NAME OF RAW MATERIAL	AVERAC PER IDENTIC	DE RATE CAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
20a. Wet Blast Furnace Slag	b. 480.	000 c 1,B/HR	600.000 LB/HR
21a.	b.	c LB/HR	LB/HR
22a.	b.	LB/HR	LB/HR
23a.	ь.	LB/HR	LB/HR
24a.	b.	c LB/HR	LB/HR

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	PRODUCT INFORMATION			
NAME OF PRODUCT	AVERAGE I PER IDENTICAL	RATE . SOURCE	PER	MAXIMUM RATE IDENTICAL SOURCE
30a. N/A	b. N/A	LB/HR	с.	N/A LB/HR
31a.	b.	LB/HR	с.	LB/HR
32a.	b.	LB/HR	с.	LB/HR
33а.	b.	LB/HR	c.	LB/HR
34a.	b.	LB/HR	¢.	LB/HR

WAST	MATERIAL INFORMATION	
NAME OF WASTE MATERIAL	AVERAGE RATE MAXIMUM RATE PER IDENTICAL SOURCE PER IDENTICAL SOUR	CE
40a. N/A	b. N/A c. N/A LB/HR	LB/HR
41a.	b. c. LB/HR	LB/HR
42a.	b. c. LB/HR	LB/HR
43a.	b. LB/HR	LB/HR
44a.	b. c. LB/HR	LB/HR

FUEL USED			TYPE	HEAT CONTENT	HEAT CONTENT		
50a. NATURAL GAS		b		c. 1000 BTU/SCF			
OTHER GAS					BTU/SCF		
OIL					BTU/GAL		
COAL					BTU/LB		
OTHER					BTU/LB		
d. AVERAGE FIRING RATE F	ER IDENTICAL SOU	JRCE: BT	c. MAXIMUM U/HR	FIRING RATE PER IDENTICAL SOURCE:	BTU/HR		

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 2

				AVEDACE		N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION R	AVERAGE	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	Ь.	0.064	LB/HR	c. AP-42. Section 13.2.4
CARBON MONOXIDE	53a.	PPM (VOL)	b .		LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	Ь.		LB/HR	с.
ORGANIC MATERIAL	55a.	PPM (VOL)	Ь.		LB/HR	¢.
SÜLFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.032	LB/HR	c. AP-42. Section 13.2.4 -(PM-10)
•	1			MAXIMUN	4 OPERATIC	N
CONTAMINANT	CONCENTR. SOURCE	ATION <u>OR</u> EMIS	SION R	ATE PER IDI	ENTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.08	LB/HR	c. AP-42, Section 13.2.4
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	с.
NITROGEN OXIDES	60a.	PPM (VOL)	Ь.		LB/HR	c.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	с.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	0.04	LB/HR	c. AP-42, Section 13.2.4 -(PM-10)

*EMISSION INFORMATION

.

*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
***OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER
CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD. ETC.

*****EXHAUST POINT INFORMATION**

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: N/A Fugitive Emissions

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): N/A

	, , , , , , , , , , , , , , , , , , ,
66. EXIT HEIGHT ABOVE GRADE: N/A	67. EXIT DIAMETER: N/A
68. GREATEST HEIGHT OF NEARBY BUILDINGS: Slag Cement Silos	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 50
AVERAGE OPERATION	MAXIMUM OPERATION
70 EXIT GAS TEMPERATURE: N/A	72 EXIT GAS TEMPERATURE: N/A
°F	oh:
1. UAS FLOW KATE THROUGH EACH EXIT: N/A	73. UAS FLOW RATE TRROUGH EACH EXIT: N/A
ACFM	AUFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 28 of <u>94</u>

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest. Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GEN	ERAL INFORMATION
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: Wet Slag from Stoarge to Dryer
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: N 02. N 03. N 06 11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER ARRUCATION. IDENTIES THE ARRUCATION):	R PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

 COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS. ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS <u>REQUIRE</u> BOTH <u>AVERAGE</u> AND <u>MAXIMUM</u> VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS				
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE. OR THE GENERAL STATE				
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:				
A VERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.				
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE				
AVERAGE OPERATING TIME.				
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING				
TIME AND AVERAGE RATES.				
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST				
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:				
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.				
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.				
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.				
This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111-1/2, Section 1039, Disclosure of this information is required				

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 H/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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Page 29 of 44

RAW	MATERIAL INFOR	MATION		
NAME OF RAW MATERIAL	PE	AVERAGE RATE ER IDENTICAL SOURCE	MAXIMUM F PER IDENTICAL	RATE SOURCE
20a. Wet Blast Furnace Slag	b.	160.000 LB/HR	c. 200,000	LB/HR
21a.	b.	LB/HR	с.	LB/HR
22a.	b.	LB/HR	с.	LB/HR
23a.	b.	LB/HR	¢.	LB/HR
2.4a.	b.	LB/HR	с.	LB/HR

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	PRODUCT INFORMATION			
NAME OF PRODUCT	AVE PER IDEN	RAGE RATE	MANIMUM RATE PER IDENTICAL SOURCE	
30a. N/A	b.	N/A c. LB/HR	N/A LB/HR	
31a.	b.	LB/HR c.	LB/HR	
32a.	b	LB/HR c.	LB/HR	
33a.	b.	c. LB/HR	LB/HR	
3-ta.	b.	LB/HR	LB/HR	

WASTI	E MATERIAL INFO	ORMATION		
NAME OF WASTE MATERIAL		AVERAGE RATE PER IDENTICAL SOURCE	PER	MAXIMUM RATE IDENTICAL SOURCE
40a. N/A	b.	N/A LB/HR	¢.	N/A LB/HR
41a.	b.	LB/HR	C.	LB/HR
42a.	b.	LB/HR	Ç.	LB/HR
43a.	b.	LB/HR	c.	LB/HR
44a.	b.	LB/HR	с.	LB/HR

		*FUEL USAGE	INFORMATION		
FUEL USE	D	T	YPE	HEAT CO	NTENT
50a. NATURAL GAS		b		c. 1000 BTU/SCF	
OTHER GAS					BTU/SCF
OIL					BTU/GAL
COAL					BTU/LB
OTHER					BTU/LB
d. AVERAGE FIRING RATE	PER IDENTICAL S	OURCE: BTU/HR	e. MAXIMUM	FIRING RATE PER IDENTICAL SOU	JRCE: BTU/HR
*THIS SECTION IS TO BE CO IN A MELT FURNACE.	MPLETED FOR AN	Y FUEL USED DIRECTLY	IN THE PROCESS	EMISSION SOURCE, E. G. GAS IN 7	A DRYER, OR COAL

Page 30 of 94

*EMISSION INFORMATION 51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

		· · · · ·		AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMISS	ION R	ATE PÊR ÎDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b.	0.024	LB/HR	c. AP-42, Section 13.2.4
CARBON MONOXIDE	53a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN ONIDES	54a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	56a.	PPM (VOL)	Ь.		LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.008	LB/HR	c. AP-42. Section 13.2.4 -(PM-10)
	<u>. </u>			MAXIMUN	1 OPERATIC	N N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION R	ATE PER IDE	ÎNTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.03	LB/HR	c. AP-42, Section 13.2.4
CARBON MONOXIDE	59a.	PPM (VOL)	b.	<u>.</u>	LB/HR	c.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	Ь.		LB/HR	C.
SULFUR DIOXIDE	62a.	PPM (VOL)	Ь.		LB/HR	¢.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b .	.01	LB/HR	c. AP-42, Section 13.2.4 -(PM-10)

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*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT. **"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

*******EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(\$) OF EXHAUST POINT: N/A Fugitive Emissions

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): N/A

67. EXIT DIAMETER: N/A
69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 120
MAXIMUM OPERATION
72. EXIT GAS TEMPERATURE: N/A
° t
73. GAS FLOW RATE THROUGH EACH EXIT: N/A
ACFM

*** THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 31_ of 94_

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

• THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GEN	IERAL INFORMATION
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: Slag Dryer
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: N 07	
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OF ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	R PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

 COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS." APC-201.

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE
AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING
TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.
This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required

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Page 32 of 94

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RAW	MATERIAL INFOR	MATION		•
NAME OF RAW MATERIAL	PE	AVERAGE RATE IR IDENTICAL SOURCE	PE	MANIMUM RATE R IDENTICAL SOURCE
20a. Wet Blast Furnace Slag	b.	136.000 LB/HR	¢.	170.000 LB/HR
21a.	b.	LB/HR	c.	LB/HR
22a.	b.	LB/HR	c.	LB/HR
23a.	b.	LB/HR	c.	LB/HR
24a.	b.	LB/HR	с.	LB/HR

	PRODUCT INFORMATION			
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	PE	MAXIMUM RATE PER IDENTICAL SOURCE	
30a. N/A	b. N/A LB/HR	c.	N/A LB/HR	
31a,	b. LB/HR	с.	LB/HR	
32a.	b. LB/HR	C.	LB/HR	
33a.	b. LB/HR	¢,	LB/HR	
34u.	b. LB/HR	C.	LB/HR	

WAST	E MATERIAL INFORMATION				
NAME OF WASTE MATERIAL	AVERAGE R. PER IDENTICAL :	ATE SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE		
40a. N/A	b. N/A	LB/HR	C .	N/A LB/HR	
41a.	b.	LB/HR	c .	LB/HR	
42a.	b.	LB/HR	C.	LB/HR	
43a.	b.	LB/HR	¢.	LB/HR	
44a.	b.	LB/HR	с.	LB/HR	

		*	FUEL USAGE	INFORMATION		
FUEL USED)	TYPE HEAT CONTE			ONTENT	
50a. NATURAL GAS	Ø	b.			c. 1000 BTU/SCF	· · · ·
OTHER GAS						BTU/SCF
OIL						BTU/GAL
COAL						BTU/LB
OTHER						BTU/LB
d. AVERAGE FIRING RATE I	PER IDENTICAL SO	URCE:		e. MAXIMUM FIRING	G RATE PER IDENTICAL SO	OURCE:
		34	BTU/HR			43 BTU/HR
*THIS SECTION IS TO BE COM	MPLETED FOR ANY	FUEL USE	DIRECTLY	N THE PROCESS EMISS	SION SOURCE, E. G. GAS IN	A DRYER, OR COAL

THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE. E. G. GAS IN A DRYER. OR COA IN A MELT FURNACE.

Page 33 of 54

EMISSION INFORMATION

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

	, <u> </u>			AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMISS	JON R/	ATE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	þ.	1.2	LB/HR	c. AP-42. Section 11.1
CARBON MONOXIDE	53a.	PPM (VOL)	b.	3.8	LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	Ъ.	4,4	LB/HR	с.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.	3.5	LB/HR	с.
SÜLFÜR DIOXIDE	56a.	PPM (VOL)	b.	0.22	LB/HR	C.
**OTHER (SPECIFY)	57a.	PPM (VOL)	Ь.	0.56	LB/HR	c. AP-42, Section 11.1 (PM-10)
		ł		MAXIMUN	1 OPERATIC	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMISS	SION R.	ATE PER IDE	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	1.5	LB/HR	c. AP-42. Section 13.2.4
CARBON MONOXIDE	59a.	PPM (VOL)	b.	4.8	LB/HR	c. AP-42. Section 13.2.4
NITROGEN OXIDES	60a.	PPM (VOL)	b .	5.6	LB/HR	c. Vendor's Contractual Guarantee
ÖRGÄNIC MATERIAL	61a.	PPM (VOL)	b .	4.3	LB/HR	c. AP-42, Section 13.2.4
SULFUR DIOXIDE	62a.	PPM (VOL)	b.	0.28	LB/HR	c. AP-42. Section 13.2.4
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	0.70	LB/HR	c. AP-42, Section 13.2.4 -(PM-10)

*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT. **"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

 65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

 66. EXIT HEIGHT ABOVE GRADE:
 67. EXIT DIAMETER:

 68. GREATEST HEIGHT OF NEARBY BUILDINGS:
 69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:

 67. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
 70. EXIT GAS TEMPERATURE:

 70. EXIT GAS TEMPERATURE:
 9F

 71. GAS FLOW RATE THROUGH EACH EXIT:
 73. GAS FLOW RATE THROUGH EACH EXIT:

 ACFM
 73. GAS FLOW RATE THROUGH EACH EXIT:

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 34 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

L. NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest. Inc.	OWNER): Lafarge Midwest. Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GENERAL IN	FORMATION
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: Ball Mill
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: N 17	
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMIS ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	SES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 % JU	N-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION. 1.

2. COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION 3. CONTROL EQUIPMENT.

4

OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE
AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING
TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.
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under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by

the Forms Management Center.

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Page 35_ 0194

RAW	MATERIAL INFORM	IATION		•
NAME OF RAW MATERIAL	AVERAGE RATE MANIMUM RA PER IDENTICAL SOURCE PER IDENTICAL SC			MANIMUM RATE R IDENTICAL SOURCE
20a. Slag Cement	b.	136,000 1.B/HR	C.	170.000 LB/HR
21a.	b.	LB/HR	C.	LB/HR
22a.	b.	LB/HR	C.	LB/HR
23a.	b.	LB/HR	C.	LB/HR
24a.	b.	LB/HR	¢.	LB/HR

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P	RODUCT INFORM	AATION	
NAME OF PRODUCT		MAXIMUM RATE PER IDENTICAL SOURCE	
30a. Slag Cement	b.	136,000 LB/HR	c. 170.000 LB/HR
3 ta.	b.	LB/HR	c. LB/HR
32a.	b.	LB/IR	c. LB/HR
33a.	b.	LB/HR	c. LB/HR
34a.	b.	LB/HR	c. LB/HR

WASTE MATERIA	L INFORMATION
NAME OF WASTE MATERIAL	AVERAGE RATE MAXIMUM RATE PER IDENTICAL SOURCE PER IDENTICAL SOURCE
40a. N/A	b. N/A c. N/A LB/HR LB/HR
41a.	b. c. LB/HR LB/HR
42a.	b. c. LB/HR LB/HR
43a.	b. c. LB/HR LB/HR
44a.	b. c. LB/HR LB/HR

*FUEL USAGE INFORMATION								
FUEL USED		ŤΥ	PE	HEAT CONTENT				
50a. NATURAL GAS	b .			c. 1000 BTU/SCF				
OTHER GAS					BTU/SCF			
OIL					BTU/GAL			
COAL					BTU/LB			
OTHER 🔲					BTU/LB			
d. AVERAGE FIRING RATE PER IDENTICAL	SOURCE:		c. MAXIMUM FIRINC	GRATE PER IDENTICAL SOURCE:	<u></u>			
l		BTU/HR			BTU/HR			

'THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER IN A MELT FURNACE.

*EMISSION INFORMATION 51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

				AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION R.	ATE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF		0.54	LB/HR	c. AP-42. Section 11.6
CARBON MONOXIDE	53a.	PPM (VOL)	b.	,	LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	Ь.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	ь.		LB/HR	с.
SULFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c.
• *OTHER (SPECIFY)	57a.	PPM (VOL)	Б.	0.27	L8/HR	c. AP-42. Section 11.6 (PM-10)
			1	MAXIMUN	1 OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION <u>OR</u> EMIS	SION R	ATE PER IDE	ENTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.68	LB/HR	c. AP-42, Section 11.6
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	¢.
**OTHER (SPECIFY)	63a.	PPM (VOL)	Ь.	0.34	LB/HR	c. AP-42, Section 11.6 (PM-10)

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*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT. **"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):						
66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:					
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:					
AVERAGE OPERATION	MAXIMUM OPERATION					
70. EXIT GAS TEMPERATURE:	72. EXIT GAS TEMPERATURE:					
	•E					
71. GAS FLOW RATE THROUGH EACH EXIT:	73. GAS FLOW RATE THROUGH EACH EXIT:					
AC	ЕМ АСЕМ					

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 37 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Latarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GENERAL INFORMATION					
5. NAME OF PROCESS: Slag Drying and Grinding	6. NAME OF EMISSION SOURCE EQUIPMENT: High Efficiency Separator				
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined				
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: N 25 11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OF ANOTHER APPLICATION. IDENTIES THE APPLICATION:	R PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY				
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR				
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %				

INSTRUCTIONS

COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION. Ι. COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. 2 COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION 3. CONTROL EQUIPMENT.

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OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS
AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE. OR THE GENERAL STATE
OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE
AVERAGE OPERATING TIME.
AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING
TIME AND AVERAGE RATES.
MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FOR THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST
PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.
This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required

under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

				Page 38 of 94
RAW	MATERIAL INFORM	IATION		
NAME OF RAW MATERIAL	PÉ	AVERAGE RATE R IDENTICAL SOURCE	PI	MAXIMUM RATE ER IDENTICAL SOURCE
20a. Slag Cement	b.	136.000 LB/HR	C.	170.000 - LB/HR
21a.	b.	LB/HR	С.	LB/HR
22a.	b.	LB/HR	с.	LB/HR
23a.	b.	LB/HR	c.	LB/HR
24a.	b.	LB/HR	C.	LB/HR

PRODUCT INFORMATION						
NAME OF PRODUCT	AVERA PER IDENTI	GE RATE CAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE			
30a. Slag Cement	b. 136	5.000 c. LB/HR	170.000 LB/HR			
31a.	b.	LB/HR	LB/HR			
32a.	b.	LB/HR	LB/HR			
33a.	b.	c. LB/HR	LB/HR			
34a.	b.	LB/HR	LB/HR			

WZ	ASTE MATERIAL INFORMATION			
NAME OF WASTE MATERIAL	AVERAGE PER IDENTICAL	RATE . SOURCE	PER	MAXIMUM RATE
40a. N/A	b. N/A	LB/HR	¢.	N/A LB/HR
41a.	b.	LB/HR	c.	LB/HR
42a.	b.	LB/HR	C.	LB/HR
43a.	b.	LB/HR	¢.	LB/HR
44 _a .	. b .	LB/HR	C.	LB/HR

*FUEL USAGE INFORMATION						
FUEL USED		TYPE		HEAT CONTE	NT	
50a. NATURAL GAS	b		C.	1000 BTU/SCF		
OTHER GAS					BTU/SCF	
OIL 🗌					BTU/GAL	
COAL				······································	BTU/LB	
OTHER				· · · · · · · · · · · · · · · · · · ·	BTU/LB	
d. AVERAGE FIRING RATE PER IDENTICAL SC	OURCE:	e, M	AXIMUM FIRING RAT	E PER IDENTICAL SOURC	E:	
		BTU/HR			BTU/HR	
*THIS SECTION IS TO BE COMPLETED FOR AN	V ELIET LISED DI	RECTIVIN THE	PROCESS EMISSION S	OURCE E C CASINA DR	VED OD CON	

PROCESS EMISSION SO 'E. E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

Page 39 of 94

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*EMISSION INFORMATION

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				AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE				METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE	
PARTICULATE MATTER	52a.	GR/SCF	b,	1.90	LB/HR	c. AP-42. Section 11.6
CARBON MONOXIDE	53a.	- PPM (VOL)	b.		LB/HR	c
NITROGEN ONIDES	54a.	PPM (VOL)	Ъ.		LB/HR	с.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	56a.	PPM (VOL)	Ь.		LB/HR	с
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.95	LB/HR	c. AP-42. Section 11.6 (PM-10)
				MAXIMUN	1 OPERATIC)N , .
CONTAMINANT	CONCENT SOURCE	RATION <u>OR</u> EMIS	SION R.	ATE PER IDI	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	Ъ.	2.38	LB/HR	c. AP-42. Section 11.6
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	C.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIQXIDE	62a.	PPM (VOL)	b.		LB/HR	C.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	1.19	LB/HR	c. AP-42, Section 11.6 (PM-10)

CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64.	FLOW DIAGRAM DESIGNATION(S) OF EXHAUST P	OINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: °F	72. EXIT GAS TEMPERATURE: °F
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM
***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXI	AUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 40 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

 THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER. OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest. Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

	GENERAL INFORMATION							
ľ	5. NAME OF PROCESS: Stag Drying and Grinding	 NAME OF EMISSION SOURCE EQUIPMENT: Dry Slag Storage Bin #10 						
	7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined						
ľ	10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: ST 10							
	11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY ANOTHER APPLICATION, IDENTIFY THE APPLICATION):							
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR 24 HRS/DAY 7 DAYS/WK 52 WKS/YR								
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 % JUN-AUG 30 % SEPT-NOV 30 %								

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201,

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE OPERATING TIME - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD. DIVIDED BY THE AVERAGE OPERATION TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD. DIVIDED BY THE AVERAGE OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION. MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATION.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Page 41_ of 94

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RAW	MATERIAL INFO	RMATION		•
NAME OF RAW MATERIAL		AVERAGE RATE ER IDENTICAL SOURCE	PE	MAXIMUM RATE R IDENTICAL SOURCE
20a. Slag Cement	b.	136.000 LB/HR	c.	170.000 LB/HR
2ta.	b.	LB/HR	с.	LB/HR
22a.	b.	LB/HR	ς.	LB/HR
23a.	b.	LB/HR	с.	LB/HR
24a.	b.	LB/HR	¢.	LB/HR

	RODUCT INFORMATION		
NAME OF PRODUCT	AVERAGE RATE MAXIMUM RATE PER IDENTICAL SOURCE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE	
30a. Slag Cement	b. 136.000 c. 170.000 LB/HR LB/F	HR	
31a.	b. c. LB/HR LB/HR	HR	
32a.	b. c. LB/HR LB/I	HR	
33a.	b. c. LB/HR L.B/I	HR	
34a.	b. c. LB/HR LB/1	HR	

WASTE	EMATERIAL INFORMATION		
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE	
40a. N/A	b. N/A LB/HR	c. N/A LB/HR	
41a.	b. LB/HR	c. LB/HR	
42a.	b. LB/HR	c. LB/HR	
43a.	b. LB/HR	c. LB/HR	
44a.	b. LB/HR	c. LB/HR	

*FUEL USAGE INFORMATION						
FUEL USED		TYI	PE	HEAT CONTENT		
50a. NATURAL GAS	b.	**********		c. 1000 BTU/SCF		
OTHER GAS					BTU/SCF	
OIL 🗌					BTU/GAL	
COAL				· · · · · · · · · · · · · · · · · · ·	BTU/LB	
OTHER					BTU/LB	
d. AVERAGE FIRING RATE PER IDENTIC	CAL SOURCE:		e. MAXIMUM FIRING R.	ATE PER IDENTICAL SOURCE:		
		BTU/HR			BTU/HR	
*THIS SECTION IS TO BE COMPLETED FO)R ANY FUEL USE	D DIRFCTI Y II	N THE PROCESS EMISSION	NSOURCE E G GAS IN A DRYE	R OR COAL	

*THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

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Page 42 of 94

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

		<u> </u>		AVERAGE	OPERATIO	Ň
CONTAMINANT	CONCENTRA SOURCE	TION <u>OR</u> EMIS:	SION RA	TE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b.	0.16	LB/HR	c. USEPA/AIRS
CARBON MONOXIDE	538.	PPM (VOL)	b.		LB/HR	¢.
NITROGEN OXIDES	54a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c
**OTHER (SPECIFY)	57a.	PPM (VOL)	Ь.	0.14	LB/HR	c. USEPA/AIRS
<u> </u>				MAXIMUN	1 OPERATIO)N
CONCENTRATION OR EMISSION RATE PER IDENTICAL METHOD US						METHOD USED TO DETERMINE CONCENTRATION OR

***EMISSION INFORMATION**

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CONTAMINANT	SOURCE					EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.20	LB/HR	c. USEPA/AIRS
CARBON MONOXIDE	59a.	PPM (VOL)	Ъ.		LB/HR	c.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	61a.	PPM (VOL)	Ъ.		LB/HR	c.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	0.17	LB/HR	c. USEAP/AIRS

 TTEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 "OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: "F	72. EXIT GAS TEMPERATURE: °F
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 43 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

• THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1.	NAMI: OF PLANT OWNER: Lafarge Midwest, Inc.	2.	NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Lafarge Midwest, Inc.
3.	STREET ADDRESS OF EMISSION SOURCE: 2150 E 130th Street	4.	CITY OF EMISSION SOURCE: Chicago

GE	ENERAL INFORMATION						
5. NAME OF PROCESS:	6. NAME OF EMISSION SOURCE EQUIPMENT:						
Slag and Cement Unloading	Barge Untoading						
7. EMISSION SOURCE EQUIPMENT MANUFACTURER:	8. MODEL NUMBER: 9. SERIAL NUMBER:						
To be determined	To be determined To be determined						
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE:	10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE:						
BUL I	BUL I						
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY ANOTHER APPLICATION, IDENTIFY THE APPLICATION): 12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR 13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK							
							14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 % JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
 AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.
 AVERAGE OPERATING TIME - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD.
 AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD. AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.
 MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>. OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:
 MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD.
 MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.
 MAXIMUM OPERATION - GREATEST EXPECTED OPERATION. AS REPRESENTED BY MAXIMUM RATES.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

RAW MATERIAL	INFORMATION	•	
NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE	
20a. Cement and Slag	b. 512,000 LB/HR	c. 640000 LB/HR	
21a.	b. LB/HR	c. LB/HR	
22a.	bLB/HR	c. LB/HR	
23a.	b. LB/HR	c. LB/HR	
24a.	b. LB/HR	c. LB/HR	

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	PRODUCT INFORMATION		
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOU	MAXIMUM RATE PER IDENTICAL SOURCE	
30a. Cement and Slag	b. 512.000	LB/HR	640.000 LB/HR
31a.	b.	¢. LB/HR	LB/HR
32a.	b.	c. LB/HR	L8/HR
33a.	b.	c. LB/HR	LB/HR
34a.	b.	c. LB/HR	LB/HR

WASTE	MATERIAL INFORMATION		
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE	
40a. N/A	b. N/A LB/HR	c. N/A LB/HR	
4 I a.	b. LB/HR	c. LB/HR	
42a.	b. LB/HR	c. LB/HR	
43a.	b. LB/HR	c. LB/HR	
44 <u>n</u> .	b. LB/HR	c. LB/HR	

*FUEL USAGE INFORMATION							
FUEL USED TYP		PE		HEAT CONTENT			
50a. NATURAL GAS		b.			с,	1000 BTU/SCF	
OTHER GAS							BTU/SCF
OIL							BTU/GAL
COAL							BTU/LB
OTHER						<u> </u>	BTU/LB
d. AVERAGE FIRING RATE PER IDENTICAL SOURCE:		e. MAXIMUM FII	RING RATE	PER IDENTICAL SOURCE:			
			BTU/HR				BTU/HR
THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE F. G. GAS IN A DRYER, OR COAL							

"THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

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NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1 51. AVERAGE OPERATION CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE CONTAMINANT c. AP-42 Section 11.12 PARTICULATE 52a. b. 0.69 LB/HR GR/SCF MATTER CARBON 53a. PPM b. с. LB/HR MONOXIDE (VOL) NITROGEN 54a. **PPM** b. Ç. LB/HR OXIDES (VOL) 55a. PPM b. c. ORGANIC (VOL) LB/HR MATERIAL PPM b. ċ. SULFUR 56a. (VOL) LB/HR DIOXIDE c. AP-42 Section 11.12 (PM-10) * OTHER PPM 57a. b. (SPECIFY) (VOL) 0.51 LB/HR MAXIMUM OPERATION OR EMISSION RATE PER IDENTICAL SOURCE MAXIMUM OPERATION METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE CONTAMINANT c. AP-42 Section 11.12 PARTICULATE 58a. b. GR/SCF 0.86 LB/HR MATTER CARBON 59a. PPM b. c.

LB/HR MONOXIDE (VOL) NITROGEN PPM 60a. b. ¢. (VOL) LB/HR OXIDES PPM ORGANIC 61a. b. С, MATERIAL (VOL) LB/HR SULFUR 62a. PPM b. С, LB/HR DIOXIDE (VOL) **OTHER PPM c. AP-42 Section 11.12 (PM-10) 63a. b. LB/HR (VOL) 0.64 (SPECIFY)

 TITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 "OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:			
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:			
AVERAGE OPERATION	MAXIMUM OPERATION			
70. EXIT GAS TEMPERATURE: •F	72. EXIT GAS TEMPERATURE: •F			
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM			
***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXH	AUSTED THROUGH AIR POLLUTION CONTROL EOUPMENT			

Page 416 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

* THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR, A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

ł.	NAME OF PLANT OWNER: Lafarge Midwest, Inc.	2.	NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Lafarge Midwest, Inc.
3.	STREET ADDRESS OF EMISSION SOURCE: 2150 E 130th Street	4.	CITY OF EMISSION SOURCE: Chicago

GENE	RAL INFORMATION
5. NAME OF PROCESS: Cement and Slag Storage	6. NAME OF EMISSION SOURCE EQUIPMENT: Cement Silos
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
 FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: Central Storage #1, Perimeter Storage #2, #3, #4, #5, #6, #7, #8 and #9 	
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT, COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS <u>REQUIRE</u> BOTH <u>AVERAGE</u> AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS." APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE OPERATING TIME - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION - OPERATING TIME. AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM • THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE • GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION. MAXIMUM OPERATION • GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATION.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111-1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

	• •				Page 47 or 94	
	RAW	MATERIAL INFOR	MATION		· · ·	
	NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE			MAXIMUM RATE PER IDENTICAL SOURCE	
20a.	Cement and Slag	b.	2,560,000 LB/HR	C.	3.200.000 LB/HR	
21a.	· · · · · · · · · · · · · · · · · · ·	b.	LB/HR	C.	LB/HR	
22a.		b.	L.B/HR	с.	LB/HR	
23a.		b.	LB/HR	c.	LB/HR	
24a.		b.	LB/HR	C.	LB/HR	

	PRODUCT INFORMATION			
NAME OF PRODUCT	AVERAGE RATE MAXIMUM RA PER IDENTICAL SOURCE PER IDENTICAL SO			
30a. Cement and Slag	b. 2.560,000 c. 3,200,000 LB/HR) LB/HR		
31a.	b. c. LB/HR	LB/HR		
32a.	b. c. LB/HR	LB/HR		
33a.	b. c. LB/HR	LB/HR		
34a.	b, c. LB/HR	LB/HR		

WAST	E MATERIAL INFORMATIC	IN		
NAME OF WASTE MATERIAL	AVEE PER IDEN	AGE RATE	MAXIMUM RATE PER IDENTICAL SOURCE	
40a. N/A	b.	N/A c. LB/HR	N/A LB/HR	
41a.	b.	LB/HR	LB/HR	
42a.	b.	LB/HR c.	. LB/HR	
-43a.	b.	EB/HR	LB/HR	
44a.	b.	LB/HR	LB/IIR	

		*FUEL U	SAGE INFORM	ATION	· · · · · ·	
FUEL USED TY		TYPE		HEAT CONTE	NT T	
50a. NATURAL GAS		b		c.	1000 BTU/SCF	
OTHER GAS						BTU/SCF
OIL					· · · · · ·	BTU/GAL
COAL	Ō					BTU/LB
OTHER						BTU/LB
d. AVERAGE FIRING RATE	PER IDENTICAL SC	URCE:	e. MA	XIMUM FIRING RAT	E PER IDENTICAL SOURCE	2
		BTU	/HR			BTU/HR
*THIS SECTION IS TO BE CO	MPLETED FOR ANY	Y FUEL USED DIREC	CTLY IN THE P	ROCESS EMISSION 5	OURCE E G GAS IN A DR	YER OR COAL

CE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

*EMISSION INFORMATION

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51.	NUMBER OF IDENTICA	L SOURCES (DESCRIBE AS REQUIRED): 1	

				AVERAGE	OPERATIO	Ň
CONTAMINANT	CONCENTRA SOURCE	TION <u>OR</u> EMIS	SION R.	ATE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b.	3.46	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	53a.	PPM (VOL)	b .	<u>.,</u>	LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	Ь.		LB/HR	c.
SULFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	2.56	LB/HR	c. AP-42 Section 11.12 (PM-10)
				MAXIMUN	1 OPERATIO	ON NC
CONTAMINANT	CONCENTR/ SOURCE	TION <u>OR</u> EMIS	SION R	ATE PER IDE	ENTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	<u></u> Ъ.	4.32	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	с.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	¢.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	с.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	3.20	LB/HR	c. AP-42 Section 11.12 (PM-10)

 ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 "OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: °F	72. EXIT GAS TEMPERATURE: °F
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM

*** THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 49 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

 THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER. OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GENE	RAL INFORMATION
5. NAME OF PROCESS: Cement and Slag Transfer	6. NAME OF EMISSION SOURCE EQUIPMENT: Intermediate Surge Bin SB1
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: SB1	
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE OPERATING TIME - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION. MAXIMUM OPERATION - GREATEST EXPECTED OPERATION. AS REPRESENTED BY MAXIMUM OPERATION.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979. Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

RAW N	4ATERIAL INFOR	MATION			
NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE			MAXIMUM RATE PER IDENTICAL SOURCE	
20a. Slag and Cement	b.	960.000 LB/HR	¢.	1.200.000 LB/HR	
21a.	b.	LB/HR	C.	LB/HR	
22a.	b.	LB/HR	¢,	LB/HR	
23a.	b.	LB/HR	c.	LB/HR	
24a.	b.	LB/HR	¢.	LB/HR	

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	PRODUCT INFORMATION		
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE	
30a. Slag and Cement	b. 960,000 LB/HF	c. 1.200.000 LB/HR	
31a.	b. LB/HF	c. LB/HR	
32a.	b. LB/HI	c. LB/HR	
33u.	b. LB/HI	c. LB/HR	
34a.	b. LB/HF	c. LB/HR	

WASTE MATERIAL INFORMATION					
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE			
40a. N/A	b. N/A LB/HR	c. N/A LB/HR			
41a.	b. LB/HR	с. 1.В/НR			
-42a.	b. LB/HR	c. LB/11R			
43a.	b. LB/HR	c. LB/HR			
44a.	b. LB/HR	c. LB/HR			

		*FUEL USAGE	INFORMATION			
FUEL USED)	TY	/PE,	HEAT CONTENT		
50a. NATURAL GAS		b		c. 1000 BTU/SCF		
OTHER GAS					BTU/SCF	
01L					BTU/GAL	
COAL					BTU/LB	
OTHER					BTU/LB	
d. AVERAGE FIRING RATE PER IDENTICAL SOURCE:			e. MAXIMUM FI	RING RATE PER IDENTICAL SOURCE:		
		BTU/HR			BTU/HR	
THIS SECTION IS TO BE COMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL						

12210 20 URCE, IN A MELT FURNACE.

_____Page 51_ of <u>94</u>

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 2

·				AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION RA	TE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b	0.10	LB/HR	c. AP-42 Section 11.12
CARBON MONONIDE	53a.	PPM (VOL)	b.		LB/HR	¢.
NTTROGEN OXIDES	54a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	56a.	PPM (VOL)	Ь.	-	LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.10	L.B/HR	c. AP-42 Section 11.12 (PM-10)
······	•			MAXIMUM	1 OPERATIC	N
CONTAMINANT	CONCENTRA SOURCE	TION OR EMIS	SION RA	ATE PER IDE	ENTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.12	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	¢.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	e.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	0.12	LB/HR	c. AP-42 Section 11.12 (PM-10)

*EMISSION INFORMATION

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 *ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 *"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:		
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:		
AVERAGE OPERATION	MAXIMUM OPERATION		
70. EXIT GAS TEMPERATURE: °F	72. EXIT GAS TEMPERATURE: •F		
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM		

**THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page 52 or 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

• THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

L. NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

Ιſ	GENERAL IN	FORMATION					
	5. NAME OF PROCESS: Slag and Cement Loading	6. NAME OF EMISSION SOURCE EQUIPMENT: Truck Loading - Cement and Slag					
	7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined					
	10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: Truck Loadout #1, Truck Loadout #2						
	11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR PREMI ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	SES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY					
	12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR					
	14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 % JU	IN-AUG 30 % SEPT-NOV 30 %					

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION. MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATION.

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RAW MATERIA	LINFORMATION	
NAME OF RAW MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
20a. Cement and Slag	b. 1,408.000 LB/HR	c. 1,760,000 LB/HR
21a.	b. LB/HR	c. LB/HR
22a.	b. LB/HR	c. LB/HR
23a.	b. LB/HR	c. LB/HR
24a.	b. LB/HR	c. LB/HR

PRODUCT INFORMATION					
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE			
30a. Cement and Slag	b. 1,408,000 1,B/HR	. c. 1.760.000 LB/HR			
31a.	b. LB/HR	c. LB/HR			
32a.	b. LB/HR	c. LB/HR			
33a.	b. LB/HR	e. LB/HR			
34a.	b. LB/HR	c. LB/HR			

W	VASTE MATERIAL INFORMATION	
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
40a. N/A	b. N/A LB/HR	c. N/A LB/HR
- 41a.	b. LB/HR	c, LB/HR
42a.	b. LB/HR	c. LB/IIR
43a.	b. LB/HR	c. LB/HR
44a.	b, LB/HR	c. LB/HR

*FUEL USAGE INFORMATION						
FUEL USED		Τ	TY	PE	HEAT CONTENT	
50a. NATURAL GAS		b.			c. 1000 BTU/SCF	<u> </u>
OTHER GAS						BTU/SCF
OIL						BTU/GAL
COAL						BTU/LB
OTHER						BTU/LB
d. AVERAGE FIRING RATE P	ER IDENTICAL SC	OURCE:		e. MAXIMUM F	RING RATE PER IDENTICAL SOURCE:	
	<u>.</u>		BTU/HR			BTU/HR
 *THIS SECTION IS TO BE COM 	PLETED FOR AN	Y FUEL US	SED DIRECTLY I	N THE PROCESS E	MISSION SOURCE E.G. GAS IN A DRIVER	OP COAL

THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

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51.	NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 2

					OPER (TIO)	NI
CONTAMINANT	CONCENTRAT: SOURCE	ION <u>OR</u> EMIS	SION RA	AVERAGE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b. ⁻	0.14	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	53a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	56a.	PPM (VOL)	b .		LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	Ъ.	0.14	LB/HR	c. AP-42 Section 11.12 (PM-10)
	<u> </u>			MAXIMUN	1 OPERATIO	N
CONTAMINANT	CONCENTRAT SOURCE	ION <u>OR</u> EMIS	SION R.	ATE PER IDE	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.18	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	c.

NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	С.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	с.
**OTHER (SPECIFY)	63a.	PPM (VOL)	b.	0.18	LB/HR	c. AP-42 Section 11.12 (PM-10)
ATTEME OF TUDO	UCH 62 NEED NO	T DE COMPLETER	D IE EMISSI	OME ADD	EVUATE"	TUROUCU AUR DOLL UTION CONTROL FOLIDATINT

 *ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 **"OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: °F	72. EXIT GAS TEMPERATURE: °F
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM

*** THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

Page <u>65</u> of <u>94</u>

DATA AND INFORMATION

PROCESS EMISSION SOURCE

* THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

L NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest. Inc.	OWNER): Lafarge Midwest. Inc.
 STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GEN	ERAL INFORMATION				
5. NAME OF PROCESS: Slag and Cement Loading	6. NAME OF EMISSION SOURCE EQUIPMENT: Barge Losding				
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: 8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined To be determined					
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: BL I					
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER APPLICATION. IDENTIFY THE APPLICATION):	PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY				
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR				
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %				

INSTRUCTIONS

I. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL. PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE OPERATING TIME - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>. OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION. MAXIMUM OPERATION - GREATEST EXPECTED OPERATION. AS REPRESENTED BY MAXIMUM RATES.

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Page 5 6 of 94

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RAWN	MATERIAL INFORM	IATION	
NAME OF RAW MATERIAL	PE	AVERAGE RATE R IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
20a. Cement and Slag	ь.	800.000 LB/HR	c. 1,000,000 LB/HR
21a.	b.	LB/HR	c. LB/HR
22a.	b.	L B /HR	c. LB/HR
23a.	b.	LB/HR	c. LB/HR
24a.	b.	LB/HR	c LB/HR

	PRODUCT INFORMATION	
NAME OF PRODUCT	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE
30a. Cement and Slag	b. 800,000 1.B/H	c. 1.000,000 R LB/HR
31a.	b. L,B/H	c. R LB/HR
32a.	b. LB/H	c. R LB/HR
33a.	b. LB/H	R LB/HR
34a.	b. LB/H	R LB/HR

WASTE MATERIAL INFORMATION						
NAME OF WASTE MATERIAL	AVERAGE RATE MAXIMUM PER IDENTICAL SOURCE PER IDENTICA			XIMUM RATE ENTICAL SOURCE		
40a. N/A	b. N/A	LB/HR	с.	N/A LB/HR		
41a,	b.	LB/HR	с.	LB/HR		
42a.	b.	LB/HR	¢.	LB/HR		
43a.	b,	LB/HR	¢.	LB/HR		
44a.	b.	LB/HR	c.	LB/HR		

*FUEL USAGE INFORMATION							
FUEL USED	FUEL USED T		TY	PE	HEAT CONTE	HEAT CONTENT	
50a. NATURAL GAS		b,			c. 1000 BTU/SCF	· · ·	
OTHER GAS						BTU/SCF	
OIL						BTU/GAL	
COAL						BTU/LB	
OTHER						BTU/LB	
d. AVERAGE FIRING RATE PER	LIDENTICAL SOL	JRCE:		e. MAXIMUM F	IRING RATE PER IDENTICAL SOURCE		
			BTU/HR			BTU/HR	
 *THIS SECTION IS TO BE COMPL 	FTED FOR ANY	FHFL USE	D DIRECTLY I	N THE PROCESS E	MISSION SOURCE E.G. GAS IN A DR	VED OD COAL	

IRECTLY EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL IN A MELT FURNACE.

51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

				AVERAGE	OPERATIO	N N
CONTAMINANT	CONCENT SOURCE	RATION OR EMISS	SION R.	ATE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	b.	0.08	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	53a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	Ь.		LB/HR	с.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	57a.	PPM (VOL)	b.	0.08	LB/HR	c. AP-42 Section 11.12 (PM-10)
	<u></u>		.	MAXIMUN	1 OPERATIO	N
CONTAMINANT	CONCENTI SOURCE	RATION <u>OR</u> EMIS	SION R	ATE PER IDE	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	b.	0.10	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	59a.	PPM (VOL)	b.		LB/HR	c.
NETROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	62a.	PPM (VOL)	b.		LB/HR	с.
**OTHER	63a.	PPM	b.			c. AP-42 Section 11.12 (PM-10)

*EMISSION INFORMATION

*ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT. ***OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

0.10

(VOL)

***EXHAUST POINT INFORMATION

LB/HR

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: 65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): 66. EXIT HEIGHT ABOVE GRADE: 67. EXIT DIAMETER: 68. GREATEST HEIGHT OF NEARBY BUILDINGS: 69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: AVERAGE OPERATION MAXIMUM OPERATION 70. EXIT GAS TEMPERATURE: 72. EXIT GAS TEMPERATURE: ٩F ٩F 71. GAS FLOW RATE THROUGH EACH EXIT: 73. GAS FLOW RATE THROUGH EACH EXIT: ACFM ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

(SPECIFY)

Page 58 of 94

* DATA AND INFORMATION

PROCESS EMISSION SOURCE

• THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE. BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF PLANT OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest. Inc.	OWNER): Lafarge Midwest. Inc.
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
2150 E 130th Street	Chicago

GENE	RAL INFORMATION		
5. NAME OF PROCESS: Slag and Cement Loading	6. NAME OF EMISSION SOURCE EQUIPMENT: Ship and Vessel Loading		
7. EMISSION SOURCE EQUIPMENT MANUFACTURER: To be determined	8. MODEL NUMBER: 9. SERIAL NUMBER: To be determined To be determined		
10. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: VL 1			
11. IDENTITY(S) OF ANY SIMILAR SOURCE(S) AT THE PLANT OR ANOTHER APPLICATION, IDENTIFY THE APPLICATION):	PREMISES NOT COVERED BY THE FORM (IF THE SOURCE IS COVERED BY		
12. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 48 WKS/YR	13. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 52 WKS/YR		
14. PERCENT OF ANNUAL THROUGHPUT: DEC-FEB 10 % MAR-MAY 30 %	JUN-AUG 30 % SEPT-NOV 30 %		

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.

 COMPLETE THE RAW MATERIAL, PRODUCT, WASTE MATERIAL, AND FUEL USAGE SECTIONS FOR THE PARTICULAR SOURCE EQUIPMENT. COMPOSITIONS OF MATERIALS MUST BE SUFFICIENTLY DETAILED TO ALLOW DETERMINATION OF THE NATURE AND QUANTITY OF POTENTIAL EMISSIONS. IN PARTICULAR, THE COMPOSITION OF PAINTS, INKS, ETC., AND ANY SOLVENTS MUST BE FULLY DETAILED.
 EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

4. OPERATION TIME AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES

5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS." APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE <u>GENERAL</u> STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD. AVERAGE OPERATING TIME - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD. DIVIDED BY THE AVERAGE OPERATION TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD. DIVIDED BY THE AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD. AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>. OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATIONS FOR ANY TWELVE MONTH PERIOD. MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.

MAXIMUM OPERATION - GREATEST EXPECTED OPERATION. AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES

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RA	W MATERIAL INFORM	ATION		
NAME OF RAW MATERIAL	PEF	AVERAGE RATE	M. PER II	AXIMUM RATE DENTICAL SOURCE
20a. Cement and Slag	ь.	960.000 LB/HR	С.	1.200.000 1.B/HR
21a.	b.	LB/HR	с.	LB/HR
22a.	b.	LB/HR	с.	LB/HR
23a.	b.	LB/HR	¢.	LB/HR
24a.	b.	LB/HR	c.	LB/HR

PE	RODUCT INFORMATION			
NAME OF PRODUCT	AVERAGE F PER IDENTICAL	MAXIMUM RATE PER IDENTICAL SOURCE		
30a. Cement and Slag	b. 960,000	LB/HR	c. 1,	200,000 LB/HR
31a.	b.	LB/HR	С.	LB/HR
32a.	b	LB/HR	¢.	LB/HR
33a.	b.	LB/HR	C ,	LB/HR
3.4a.	b.	LB/HR	¢.	LB/HR

WASTE MATERIAL INFORMATION						
NAME OF WASTE MATERIAL	AVERAGE RATE PER IDENTICAL SOURCE	MAXIMUM RATE PER IDENTICAL SOURCE				
40a. N/A	b. N/A c. LB/HR	N/A LB/HR				
41a.	b. c. LB/HR	LB/HR				
42a.	b. c. LB/HR	LB/HR				
43a.	b. c. LB/HR	LB/HR				
44a.	b. c. LB/HR	LB/HR				

*FUEL USAGE INFORMATION							
FUEL USED	T	/PE	HEAT CONTENT				
50a. NATURAL GAS	b		c. 1000 BTU/SCF				
OTHER GAS				BTU/SCF			
OII.				BTU/GAL			
COAL				BTU/LB			
OTHER				BTU/LB			
d. AVERAGE FIRING RATE PER IDENTICAL S	OURCE:	e. MAXIMUM FIRING R	ATE PER IDENTICAL SOURCE:				
	BTU/HR			BTU/HR			

THIS SECTION IS TO BE IN A MELT FURNACE. OMPLETED FOR ANY FUEL USED DIRECTLY IN THE PROCESS EMISSION SOURCE, E. G. GAS IN A DRYER, OR COAL

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51. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED): 1

				AVERAGE	OPERATIO	N
CONTAMINANT	CONCENTRA SOURCE	TION <u>OR</u> EMIS:	SION R	ATE PER IDE	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	52a.	GR/SCF	þ.	1.30	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	53a.	PPM (VOL)	b.		LB/HR	c.
NITROGEN OXIDES	54a.	PPM (VOL)	b.		LB/HR	c.
ORGANIC MATERIAL	55a.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	56a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	57a.	—— РРМ (VOL)	b.	0.96	LB/HR	c. AP-42 Section 11.12 (PM-10)
				MAXIMUN	1 OPERATIO	N .
CONTAMINANT	CONCENTRA SOURCE	TION <u>OR</u> EMIS	SION R	ATE PER IDE	INTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	58a.	GR/SCF	Ь.	1.62	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	59a.	PPM (VOL)	Ъ.		LB/HR	с.
NITROGEN OXIDES	60a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	61a.	PPM (VOL)	Ъ.		LB/HR	c.
SULFUR	62a.		b.			c.

*EMISSION INFORMATION

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 DIOXIDE
 (VOL)
 LB/HR

 **OTHER (SPECIFY)
 63a.
 PPM (VOL)
 b.
 c.
 AP-42 Section 11.12 (PM-10)

 *ITEMS 52 THROUGH 63 NEED NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
 ***OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

***EXHAUST POINT INFORMATION

64. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT:

65. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.):

66. EXIT HEIGHT ABOVE GRADE:	67. EXIT DIAMETER:
68. GREATEST HEIGHT OF NEARBY BUILDINGS:	69. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY:
AVERAGE OPERATION	MAXIMUM OPERATION
70. EXIT GAS TEMPERATURE: °F	72. EXIT GAS TEMPERATURE:
71. GAS FLOW RATE THROUGH EACH EXIT: ACFM	73. GAS FLOW RATE THROUGH EACH EXIT: ACFM

***THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page 6 of 74

* DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1.	NAME OF OWNER: Lafarge Midwest, Inc.	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Lafarge Midwest, Inc.
3.	STREET ADDRESS OF CONTROL EQUIPMENT: 2150 E. 130 th Street	4. CITY OF CONTROL EQUIPMENT Chicago
5.	NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: Surge Bin I	Dust Collector
		,

INSTRUCTIONS

- I. COMPLETE THE ABOVE IDENTIFICATION SECTION.
- COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.

5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION. AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.

6. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - GREATEST EXPECTED OPERATION. AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES

This Agency is authorized to require this information under Illinois Revised Statutes. 1979, Chapter 411-1/2, Section 1039, Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

			· ·		R 011009	62194
		COND	ENSER			
1.	FLOW DIAGRAM DESIGNATION(S) OF CONDENS	ER:				
2.	MANUFACTURER: 3.	MODEL NAME AN	D NUMBER:	4. HEAT EXCHA	NGE AREA:	
	AVERAGE OPERATION OF SOURCE		МАХ	IMUM OPERATION O	F SOURCE	
5.	COOLANT FLOW RATE PER CONDENSER: WATER GPM AIR OTHER: TYPE, FLOW RATE	SCFM	10. COOLANT FLOW WATER OTHER: TYPE	RATE PER CONDENS	ER: SCFM ATE	
6.	GAS FLOW RATE:	SCEM	11. GAS FLOW RATE:			SCEM

7.	COOLANT TEMPERATURE:	8. GAS TEMPERATURE:	12.	COOLAN	T TEMPERATUR	E.:	13.	GAS TEM	PERATURE:	
	INLET°F OUTLET°F	INLET *F OUTLET *F		INLET	•F OUTLET	•F	1	INLET	°F OUTLET	°F
9.	EFFICIENCY OF CONDENSER (SEE INSTRUCTION 4):			EFFICIEN	CY OF CONDEN	SER (SEE IN	VSTRUCT	ION 4):	
		%								%

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	*ELECTRICAL	PREC	CIPITATOR
1.	FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR	÷	
2.	MANUFACTURER:	3.	MODEL NAME AND NUMBER:
4.	COLLECTING ELECTRODE AREA PER CONTROL DEVICE:		· FT;
	AVERAGE OPERATION OF SOURCE		MAXIMUM OPERATION OF SOURCE
5.	GAS FLOW RATE: SCFM	7.	GAS FLOW RATE: SCFM
6.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4)
5	SUBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRI	CAL	PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.

*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWEVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S SPECIFICATIONS. INCLUDING ANY DRAWINGS, TECHNICAL DOCUMENTS, ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALYSIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL INFORMATION.

FILTER	R UNIT	
1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC6		
2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD	
4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD	FT?
6. CLEANING METHOD:	OTHER: SPECIFY	
7. GAS COOLING METHOD: DUCT WORK: LENGTH	_ FT., DIAM IN.	
BLEED-IN AIR 🔲 WATER SPRAY 🔀 OTHER: SPECIFY N/A		
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE	
8. GAS FLOW RATE (FROM SOURCE): 6.300 SCFM	12. GAS FLOW RATE (FROM SOURCE): 7,000	SCFM
9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	
10. INLET GAS CONDITION: TEMPERATURE <u>Amb.</u> °F DEWPOINT <u>Amb.</u> °F	14. INLET GAS CONDITION: TEMPERATURE <u>Amb.</u> °F DEWPOINT <u>Amb.</u> °F	
11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99	%

1. NUMBER OF IDENTICAL CONTROL UNITS OR CONTROL SYSTEMS (DESCRIBE AS REQUIRED): 1								
				AVERAGE	OPERATIO	N		
CONTAMINANT	CONCENT CO	RATION OR EMIS NTROL UNITS OR	SION R	ATE PER IDE Rol system	ENTICAL 4	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE		
PARTICULATE MATTER	2a.	GR/SCF	b.	0.10	LB/HR	c. AP-42 Section 11.12		
CARBON MONOXIDE	За.	PPM (VOL)	b.	_	LB/HR	с.		
NITROGEN OXIDES	4a.	PPM (VOL)	b.		LB/HR	¢.		
ORGANIC MATERIAL	5a.	PPM (VOL)	b.		LB/HR	C		
SULFUR DIOXIDE	6a.	PPM (VOL)	b.		LB/HR	c		
**OTHER (SPECIFY)	7a.	PPM (VOL)	Ъ.	0.10	LB/HR	c. AP-42 Section 11.12 (PM-10)		
				MAXIMUM	OPERATIC)N		
CONTAMINANT	CONCENT CO	RATION OR EMIS NTROL UNITS OF	SION R	ATE PER IDE ROL SYSTEM	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE		
PARTICULATE MATTER	8a.	GR/SCF	b.	0.12	LB/HR	c. AP-42 Section 11.12		
CARBON MONOXIDE	9a.	PPM (VOL)	b.		LB/HR	c.		
NITROGEN OXIDES	10a.	PPM (VOL)	b.		LB/HR	C.		
ORGANIC MATERIAL	Ha.	PPM (VOL)	Ъ.		LB/HR	c.		
SULFUR DIOXIDE	12a.	РРМ (VOL)	b.		LB/HR	с.		
**OTHER (SPECIFY)	13a.	PPM (VOL)	b.	0.12	LB/HR	c. AP-42 Section 11.12 (PM-10)		
**"OTHER" CONTAN CONTAMINANTS	**OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.							

EMISSION INFORMATION

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EXHAUST POINT INFORMATION

1. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: DC6

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2. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): Horizontal Vent

3. EXIT HEIGHT ABOVE GRADE: 15 ft.	4. EXIT DIAMETER: 1 ft.
5. GREATEST HEIGHT OF NEARBY BUILDINGS: 135 feet	6. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 120 ft.
AVERAGE OPERATION	MAXIMUM OPERATION
7. EXIT GAS TEMPERATURE: Amb. °F	9. EXIT GAS TEMPERATURE: Amb. °F
8. GAS FLOW RATE THROUGH EACH EXIT: 6,300 ACFM	10. GAS FLOW RATE THROUGH EACH EXIT: 7,000 ACFM

R 011011

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page 64 ofiy

* DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

• THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER. OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest. Inc.
 STREET ADDRESS OF CONTROL EQUIPMENT:	4. CITY OF CONTROL EQUIPMENT
2150 E. 130 th Street	Chicago
5. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: 3	Ship/Vessel Loading Dust Collector

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION SECTION.

- COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.

5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.

6.	FOR GENERAL	INFORMATION REFER	TO "GENERAL	INSTRUCTIONS FOR	PERMIT APP	LICATIONS," APC-201.

DEFINITIONS AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD. AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES. This Agency is authorized to require this information under Illinois Revised Statutes, 1979. Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

R 011012

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		CONDI	ENSER		
1.	FLOW DIAGRAM DESIGNATION(S) OF C	CONDENSER:			
2.	MANUFACTURER:	3. MODEL NAME AN	D NUMBER: 4.	HEAT EXCHANGE AREA:	Łl.;
	AVERAGE OPERATION OF	FSOURCE	MAXIMU	M OPERATION OF SOURCE	
5.	COOLANT FLOW RATE PER CONDENSE WATER GPMAIR OTHER: TYPE, FLOW RA	ER: SCFM SCFM ATE	IO. COOLANT FLOW RATI WATER OTHER: TYPE	E PER CONDENSER: , GPM AIR: , FLOW RATE	SCFM
6.	GAS FLOW RATE:	SCFM	11. GAS FLOW RATE:		SCFM
7.	COOLANT TEMPERATURE: 8. GA INLET°F OUTLET°F INI	AS TEMPERATURE: LET°F OUTLET°F	12. COOLANT TEMPERAT INLET•F OUTLET	URE: 13. GAS TEMPER 	ATURE: OUTLET9F
9.	EFFICIENCY OF CONDENSER (SEE INST	TRUCTION 4): %	14. EFFICIENCY OF COND	ENSER (SEE INSTRUCTION	4):

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*ELECTRICAL	PRECIPITATOR
1. FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR	
2. MANUFACTURER:	3. MODEL NAME AND NUMBER:
4. COLLECTING ELECTRODE AREA PER CONTROL DEVICE:	. این از
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE
5. GAS FLOW RATE: SCFM	7. GAS FLOW RATE: SCFM
6. EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8. EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %
SUBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRI	CAL PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.
*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWE SPECIFICATIONS, INCLUDING ANY DRAWINGS, TECHNICAL DOCUME SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALY: INFORMATION.	IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A EVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S NTS, ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL
FILTE	R UNIT
1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC7	
2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD
4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD

			FT ²
-	6. CLEANING METHOD:	OTHER: SPECIFY	
	7. GAS COOLING METHOD: DUCT WORK: LENGTH	FT., DIAM IN.	
	AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE	
	8. GAS FLOW RATE (FROM SOURCE): 10,800 SCFM	12. GAS FLOW RATE (FROM SOURCE): 12,000	SCFM
	9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	
	10. INLET GAS CONDITION: TEMPERATURE <u>Amb.</u> °F DEWPOINT <u>Amb.</u> °F	 INLET GAS CONDITION: TEMPERATURE <u>Amb.</u> °F DEWPOINT <u>Amb.</u> °F 	
	11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99	%

EMISSION INFORMATION NUMBER OF IDENTICAL CONTROL UNITS OR CONTROL SYSTEMS (DESCRIBE AS REQUIRED): 1 1. AVERAGE OPERATION CONCENTRATION OR EMISSION RATE PER IDENTICAL METHOD USED TO DETERMINE CONCENTRATION OR CONTROL UNITS OR CONTROL SYSTEM EMISSION RATE CONTAMINANT c. AP-42 Section 11.12 PARTICULATE 2a. b. GR/SCF LB/HR MATTER 1.30 PPM b, CARBON ¢. За. MONOXIDE (VOL) LB/HR PPM b. NITROGEN 4a. ¢. LB/HR OXIDES (VOL) ORGANIC 5a. PPM b. С. LB/HR MATERIAL (VOL) SULFUR PPM b. ¢. 6a. LB/HR DIOXIDE (VOL) PPM c. AP-42 Section 11.12 (PM-10) **OTHER 7a. b, (VOL) 0.96 LB/HR (SPECIFY) MAXIMUM OPERATION CONCENTRATION OR EMISSION RATE PER IDENTICAL METHOD USED TO DETERMINE CONCENTRATION OR CONTROL UNITS OR CONTROL SYSTEM CONTAMINANT EMISSION RATE PARTICULATE 8a. c. AP-42 Section 11.12 b. LB/HR GR/SCF 1,62 MATTER CARBON 9a, PPM b. Ç. LB/HR MONOXIDE (VOL) PPM NITROGEN 10a. b. Ċ. LB/HR OXIDES (VOL) PPM ORGANIC 11a. b. C. MATERIAL (VOL) LB/HR SULFUR 12a. PPM b. c. DIOXIDE LB/HR (VOL) **OTHER PPM c. AP-42 Section 11.12 (PM-10) 13a. b. (SPECIFY) (VOL) 1.20 LB/HR * "OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

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I. FLOW	DIAGRAM DESIGNATION(S) OF EXHAUST POINT: DC7				
2. DESCR	IPTION OF EXHAUST POINT (LOCATION IN RELATION TO F	UILDINGS, DIRECTION, HOODING, ETC.): Vertical Stack			
3. EXIT H	EIGHT ABOVE GRADE: 30 ft.	4. EXIT DIAMETER: 3 ft.			
3. GREAT	EST HEIGHT OF NEARBY BUILDINGS: 135 Ret	6. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 120 It.			
	AVERAGE OPERATION	MAXIMUM OPERATION			
7. EXIT G	AS TEMPERATURE: Amb. °F	9. EXIT GAS TEMPERATURE: Amb.			
8. GAS FL	OW RATE THROUGH EACH EXIT: 10,800 ACFM	10. GAS FLOW RATE THROUGH EACH EXIT: 12,000 ACFM			

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page 67 of 94

* DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

• THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR, A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
 STREET ADDRESS OF CONTROL EQUIPMENT:	4. CITY OF CONTROL EQUIPMENT
2150 E. 130 th Street	Chicago
5. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: Barge Load	ing Dust Collector

INSTRUCTIONS

- 1. COMPLETE THE ABOVE IDENTIFICATION SECTION.
- 2. COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- 4. EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.

5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.

6. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - <u>GREATEST EXPECTED</u> OPERATION, <u>AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES</u>

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<u> </u>	· · · · · · · · · · · · · · · · · · ·	COND	ENSER			
1.	FLOW DIAGRAM DESIGNATION(S) OF CON	IDENSER:				_
2.	MANUFACTURER:	3. MODEL NAME AN	D NUMBER:	4. HEAT EXCHANGE AR	EA:	FT ²
	AVERAGE OPERATION OF SC	URCE	MAX	IMUM OPERATION OF SOUR	CE	
5.	COOLANT FLOW RATE PER CONDENSER: WATER GPM AIR OTHER: TYPE FLOW RATE	SCFM	10. COOLANT FLOW WATER OTHER: TYPE	RATE PER CONDENSER: GPMAIR FLOW RATE	SCFM	
6,	GAS FLOW RATE:	SCFM	H. GAS FLOW RATE:			SCFM
7.	COOLANT TEMPERATURE: 8. GAS T INLET °F OUTLET °F INLET	EMPERATURE: °F OUTLET°F	12. COOLANT TEMPE INLET°F OU	RATURE: 13. GAS TEM TLET9F INLET	PERATURE: °F OUTLET	°F
9.	EFFICIENCY OF CONDENSER (SEE INSTRU	CTION 4): %	14. EFFICIENCY OF C	ONDENSER (SEE INSTRUCTI	ION 4);	%

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	*ELECTRICAL	PRE	CIPITATOR
Ι.	FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR		
2.	MANUFACTURER:	3.	MODEL NAME AND NUMBER:
4.	COLLECTING ELECTRODE AREA PER CONTROL DEVICE:		्राच्
[AVERAGE OPERATION OF SOURCE		MAXIMUM OPERATION OF SOURCE
5.	GAS FLOW RATE: SCFM	7.	GAS FLOW RATE: SCFM
6.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %
S	UBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRIC	CAL	PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.

*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWEVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S SPECIFICATIONS, INCLUDING ANY DRAWINGS, TECHNICAL DOCUMENTS. ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALYSIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL INFORMATION.

FILTER	R UNIT	
1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC8		· · · · ·
2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD	·
4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD	FT ²
6. CLEANING METHOD:	OTHER: SPECIFY	
7. GAS COOLING METHOD: DUCT WORK: LENGTH	FT., DIAM IN.	
BLEED-IN AIR 🗍 WATER SPRAY 🔀 OTHER: SPECIFY N/A		
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE	
8. GAS FLOW RATE (FROM SOURCE): 5,400 SCFM	12. GAS FLOW RATE (FROM SOURCE): 6,000	SCFM
9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A</u> _SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	
10. INLET GAS CONDITION: TEMPERATURE <u>Amb</u> °F DEWPOINT <u>< Amb</u> °F	14. INLET GAS CONDITION: TEMPERATURE <u>Amb</u> °F DEWPOINT <u>< Amb</u> °F	. <u></u>
11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99	

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R 011015

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I. NUMBER OF ID	ENTICAL CONTROL UNITS OR O	CONTROL SYSTEMS	DESCRIBI	E AS REQUIRED): 1
	·	AVERAGE	OPERATIO	DN
CONTAMINANT	CONCENTRATION OR EMIS CONTROL UNITS O	SSION RATE PER IDE R CONTROL SYSTEM	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	2a. GR/SCF	b. 0.08	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	3a. PPM (VOL)	Ъ.	LB/HR	c.
NITROGEN OXIDES	4a. PPM (VOL)	b.	LB/HR	с.
ÓRGANIC MATERIAL	5a. PPM (VOL)	b.	LB/HR	с.
SULFUR DIOXIDE	6a. PPM (VOL)	b.	LB/HR	C.
**OTHER (SPECIFY)	7a. PPM (VOL)	b. 0.08	LB/HR	c. AP-42 Section 11.12 (PM-10)
	<u> </u>	MAXIMUM	OPERATIO	0N
CONTAMINANT	CONCENTRATION OR EMI CONTROL UNITS O	SSION RATE PER IDE R CONTROL SYSTEM	NTICAL	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	8a. GR/SCF	b. 0.10	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	9a. PPM (VOL)	b.	LB/HR	C.
NITROGEN OXIDES	10a. PPM (VOL)	b.	LB/HR	с.
ORGANIC MATERIAL	11a. PPM (VOL)	b	LB/HR	C.
SULFUR DIOXIDE	12a. PPM (VOL)	b.	LB/HR	C.
**OTHER (SPECIFY)	13a. PPM (VOL)	ъ. 0.10	LB/HR	c. AP-42 Section 11.12 (PM-10)
**"OTHER" CONTAM CONTAMINANTS	I MINANT SHOULD BE USED FOR ARE ASBESTOS, BERYLLIUM, I	AN AIR CONTAMINA MERCURY, VINYL CH	ANT NOT S Sloride, I	SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER LEAD, ETC.
·-·		EXHAUST POIN	T INFORM	4ATION
I. FLOW DIAGRA	M DESIGNATION(S) OF EXHAU	ST POINT: DC8		
2. DESCRIPTION (DF EXHAUST POINT (LOCATION	IN RELATION TO B	JILDINGS.	5. DIRECTION, HOODING, ETC.): Vertical Stack
3. EXIT HEIGHT A	BOVE GRADE: 30 ft.		4. EX	(IT DIAMETER: 3 ft.
5. GREATEST HEI	GHT OF NEARBY BUILDINGS:	135 feet	6. EX	IT DISTANCE FROM NEAREST PLANT BOUNDARY: 120 ft.
	AVERAGE OPERATION			MAXIMUM OPERATION
7. EXIT GAS TEM	PERATURE: Amb.	٥Ŀ	9. EX	(IT GAS TEMPERATURE: Amb.
8. GAS FLOW RAT	TE THROUGH EACH EXIT: 5,40	0	10. GĀ	AS FLOW RATE THROUGH EACH EXIT: 6,000

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STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page _____ of ____

* DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF OWNER:	 NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.
3. STREET ADDRESS OF CONTROL EQUIPMENT:	4. CITY OF CONTROL EQUIPMENT
2150 E. 130th Street	Chicago
3. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: Slag Sto	brage Bin Dust Collector

INSTRUCTIONS

- 1. COMPLETE THE ABOVE IDENTIFICATION SECTION.
- 2. COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- 4. EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.

5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.

6. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS." APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - GREATEST EXPECTED OPERATION. AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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	· · · · · · · · · · · · · · · · · · ·	COND	ENSER			
1.	FLOW DIAGRAM DESIGNATION(S) OF C	ONDENSER:			- · · · -	
2.	MANUFACTURER:	3. MODEL NAME AN	ID NUMBER:	4. HEAT EXCHAN	NGE AREA:	FT?
	AVERAGE OPERATION OF	SOURCE	M	IAXIMUM OPERATION O	F SOURCE	
5.	COOLANT FLOW RATE PER CONDENSE WATER GPM AIR OTHER: TYPE FLOW RA	R:SCFM SCFM TE	10. COOLANT FLO WATER OTHER: TYPE	OW RATE PER CONDENSE GPMAIR , FLOW RA	ER: SCFM SCFM	
6.	GAS FLOW RATE:	SCFM	H. GAS FLOW RA	ſΈ:		SCFM
7.	COOLANT TEMPERATURE: 8. GAS INLET °F OUTLET °F INL	S TEMPERATURE: ET°F OUTLET°F	12. COOLANT TE INLET°F	MPERATURE: 13. GA OUTLETºF IN	IS TEMPERATURE: LETºF OUTLET	r•r
9.	EFFICIENCY OF CONDENSER (SEE INST	RUCTION 4): %	14. EFFICIENCY C	F CONDENSER (SEE INS	FRUCTION 4):	%

	•ELECTRICAL	PREC	CIPITATOR			
1.	1. FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR:					
2.	MANUFACTURER:	3.	MODEL NAME AND NUMBER:			
4.	COLLECTING ELECTRODE AREA PER CONTROL DEVICE:	L	· E.1.3			
	AVERAGE OPERATION OF SOURCE	_	MAXIMUM OPERATION OF SOURCE			
5.	GAS FLOW RATE: SCFM	7.	GAS FLOW RATE: SCFM			
6.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %			
S	UBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRIC	CAL	PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.			

*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWEVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S SPECIFICATIONS, INCLUDING ANY DRAWINGS, TECHNICAL DOCUMENTS, ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALYSIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL INFORMATION.

FILT	FILTER UNIT						
1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC9							
2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD						
4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD FT ²						
6. CLEANING METHOD:	f [] OTHER: SPECIFY						
7. GAS COOLING METHOD: DUCT WORK: LENGTH	FT., DIAM IN. <u>A</u>						
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE						
8. GAS FLOW RATE (FROM SOURCE): 2,300 SCFM	12. GAS FLOW RATE (FROM SOURCE): 2,500 SCFM						
9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM						
10. INLET GAS CONDITION: TEMPERATURE <u>Amb.</u> °F DEWPOINT <u>Amb.</u> °F	14. INLET GAS CONDITION: TEMPERATURE <u>Amb.</u> °F DEWPOINT <u>Amb.</u> °F						
11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %						

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EMISSION INFORMATION

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				AVERAGE	OPERATIO	N
CONTAMINANT	CON	CENTRATION OR EMIS CONTROL UNITS OF	SION R CONT	ATE PER IDE ROL SYSTEM	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	2a.	GR/SCF	b.	0.18	LB/HR	c. AP-42 Section 11.12
CARBON MONOXIDE	3a.	PPM (VOL)	b.		LB/HR	с.
NITROGEN OXIDES	4a.	PPM (VOL)	b.		LB/HR	С.
ORGANIC MATERIAL	5a.	PPM (VOL)	b.		LB/HR	с.
SULFUR DIOXIDE	6a.	PPM (VOL)	b.		LB/HR	С.
**OTHER (SPECIFY)	7a.	PPM (VOL)	b.	0.17	LB/HR	c. AP-42 Section 11.12 (PM-10)
				MAXIMUM	1 OPERATIC)N
CONTAMINANT	CON	CENTRATION OR EMIS CONTROL UNITS OF	SION F	ATE PER ID	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OF EMISSION RATE
PARTICULATE MATTER	8a.	GR/SCF	b.	0.23	LB/HR	c. AP-42 Section 11.12
CARBON MUNOXIDE	9a.	PPM (VOL)	b.		LB/HR	с.
NITROGEN OXIDES	10a.	PPM (VOL)	b .	••	LB/HR	с.
ORGANIC MATERIAL	Ha.	PPM (VOL)	b.		LB/HR	c.
SULFUR DIOXIDE	12a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY)	13a.	PPM (VOL)	b.	0.14	LB/HR	c. AP-42 Section 11.1 (PM-10)

	EXHAUST POIN	T INFORMATION
1.	FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: DC9	
2.	DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BU	JILDINGS, DIRECTION, HOODING, ETC.): Horizontal on top of silo
3.	EXIT HEIGHT ABOVE GRADE: 137 ft.	4. EXIT DIAMETER: 2 tt.
5.	GREATEST HEIGHT OF NEARBY BUILDINGS: 135 feet	6. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 120 ft.
	AVERAGE OPERATION	MAXIMUM OPERATION
7.	EXIT GAS TEMPERATURE: Amb. °F	9. EXIT GAS TEMPERATURE: Amb. °F
8.	GAS FLOW RATE THROUGH EACH EXIT: 2,300 ACFM	10. GAS FLOW RATE THROUGH EACH EXIT: 2,500 ACFM

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page 73 of Ry

• DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

1. NAME OF OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafarge Midwest, Inc	OWNER): Lafarge Midwest. Inc
3. STREET ADDRESS OF CONTROL EQUIPMENT:	4. CITY OF CONTROL EQUIPMENT
2150 E. 130 th Street	Chicago
5. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: Slag Dryer	Dust Collector

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION SECTION.

- 2. COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT. OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- 4. EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.

5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.

6.	FOR GENERAL INFORMATION REFER TO "GENERAL	. INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>, OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES. This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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	COND	ENSER
.	FLOW DIAGRAM DESIGNATION(S) OF CONDENSER:	
2.	MANUFACTURER: 3. MODEL NAME AN	D NUMBER: 4. HEAT EXCHANGE AREA: FT ²
	AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE
5.	COOLANT FLOW RATE PER CONDENSER: WATER GPM AIR SCFM OTHER: TYPE FLOW RATE	10. COOLANT FLOW RATE PER CONDENSER: WATER GPM AIR SCFM OTHER: TYPE FLOW RATE
6.	GAS FLOW RATE: SCFM	11. GAS FLOW RATE: SCFM
7.	COOLANT TEMPERATURE: 8. GAS TEMPERATURE: INLET°F OUTLET°F INLET°F OUTLET°F	12. COOLANT TEMPERATURE: 13. GAS TEMPERATURE: INLET
9.	EFFICIENCY OF CONDENSER (SEE INSTRUCTION 4): %	14. EFFICIENCY OF CONDENSER (SEE INSTRUCTION 4):

*ELECTRICAL I	PRECIPITATOR					
T. FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR:						
2. MANUFACTURER:	3. MODEL NAME AND NUMBER:					
4. COLLECTING ELECTRODE AREA PER CONTROL DEVICE:	. FT ²					
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE					
5. GAS FLOW RATE: SCFM	7. GAS FLOW RATE: SCFM					
6. EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8. EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %					
SUBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRIC	CAL PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.					

*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWEVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S SPECIFICATIONS, INCLUDING ANY DRAWINGS, TECHNICAL DOCUMENTS, ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALYSIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL INFORMATION.

	FILTER UNIT						
	1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC10						
	2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD					
	4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD FT ²					
	6. CLEANING METHOD: SHAKER REVERSE AIR PULSE AIR PULSE JET	OTHER: SPECIFY					
	7. GAS COOLING METHOD: ☐ DUCT WORK: LENGTH ☐ BLEED-IN AIR ☐ WATER SPRAY	_ FT., DIAM IN.					
Γ	AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE					
ſ	8. GAS FLOW RATE (FROM SOURCE): 47,000 SCFM	12. GAS FLOW RATE (FROM SOURCE): 50,000 SCFM					
	9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM					
	10. INLET GAS CONDITION: TEMPERATURE <u>176</u> °F DEWPOINT <u><176</u> °F	14. INLET GAS CONDITION: TEMPERATURE <u>176</u> °F DEWPOINT <u><176</u> °F					
	11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %					

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE, EAST SPRINGFIELD, ILLINOIS 62702

Page 76 org

* DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

I. NAME OF OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM				
Lafarge Midwest, Inc.	OWNER): Lafarge Midwest, Inc.				
3. STREET ADDRESS OF CONTROL EQUIPMENT:	4. CITY OF CONTROL EQUIPMENT				
2150 E. 130 th Street	Chicago				
5. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: Ball Mill Dust Collector					

INSTRUCTIONS

- 1. COMPLETE THE ABOVE IDENTIFICATION SECTION.
- 2. COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- 4. EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION. THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.
- 5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.
- 6. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>. OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES. This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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			COND	ENSER				
1.	FLOW DIAGRAM DESIGNATION(S)) OF CONDENSER:						
2.	MANUFACTURER:	3. MODE	L NAME AN	D NUMBER:	4. HEAT	EXCHANGE AR	EA:	FT ²
	AVERAGE OPERATIO	IN OF SOURCE			MAXIMUM OPER.	ATION OF SOUR	CE	
5.	COOLANT FLOW RATE PER COND WATER GPM AIR OTHER: TYPE, FLO	ENSER:SCFM SCFM W RATE		10. COOLANT FL WATER OTHER: TYP	OW RATE PER CO GPM E	ONDENSER: AIR FLOW RATE	SCFM	
6.	GAS FLOW RATE:		SCFM	11. GAS FLOW RA	ATE:			SCFM
7.	COOLANT TEMPERATURE: 8 INLET°F OUTLET°F	8. GAS TEMPERATUR INLETºF OUT	le: Let°f	12. COOLANT TE INLET°F	MPERATURE: FOUTLET°F	13. GAS TEMI INLET	PERATURE: °F OUTLET	•p
9,	EFFICIENCY OF CONDENSER (SEE	INSTRUCTION 4):	%	14. EFFICIENCY	OF CONDENSER (SEE INSTRUCTI	ON 4):	9% 70

	*ELECTRICAL	PREC	CIPITATOR
1.	FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR:	;	
2.	MANUFACTÜRER:	3.	MODEL NAME AND NUMBER:
4.	COLLECTING ELECTRODE AREA PER CONTROL DEVICE:		. البار مالية المالية ا
	AVERAGE OPERATION OF SOURCE		MAXIMUM OPERATION OF SOURCE
5.	GAS FLOW RATE: SCFM	7.	GAS FLOW RATE: SCFM
6.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %
S	SUBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRI	CAL	PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.

*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWEVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S SPECIFICATIONS, INCLUDING ANY DRAWINGS, TECHNICAL DOCUMENTS, ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALYSIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL INFORMATION.

FILTER UNIT								
1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC11								
2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD							
4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD FT ²							
6. CLEANING METHOD:	OTHER: SPECIFY							
7. GAS COOLING METHOD: DUCT WORK: LENGTH	FT., DIAM IN.							
BLEED-IN AIR 🔲 WATER SPRAY 🔀 OTHER: SPECIFY <u>N/A</u>								
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE							
8. GAS FLOW RATE (FROM SOURCE): 31,000 SCFM	12. GAS FLOW RATE (FROM SOURCE): 33,000 SCFM							
9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM							
10. INLET GAS CONDITION: TEMPERATURE <u>212</u> °F DEWPOINT <u><212</u> °F	14. INLET GAS CONDITION: TEMPERATURE 212_ °F DEWPOINT <212 °F							
11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %							

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		····		EMISSION I	NFORMATI	ON
I. NUMBER OF IC	DENTICAL	CONTROL UNITS OR C	ONTR	OL SYSTEMS	(DESCRIB	E AS REQUIRED): 1
<u> </u>		·		AVERAGE	OPERATIO	N
CONTAMINANT	CON	CENTRATION OR EMIS CONTROL UNITS OF	SION I	RATE PER IDI FROL SYSTEM	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	2a.	GR/SCF	þ.	0.54	LB/HR	c. AP-42 Section 11.1
CARBON MONOXIDE	За,	PPM (VOL)	b.		LB/HR	¢.
NITROGEN ONIDES	4a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	5a.	PPM (VOL)	: b.	<u> </u>	LB/HR	c
SULFUR DIOXIDE	6a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY')	7a.	PPM (VOL)	b.	0.27	LB/HR	c. AP-42 Section 11.1 (PM-10)

MAXIMUM OPERATION							
CONTAMINANT	CONCEN	TRATION OR EMIS	SION F	RATE PER ID	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE	
PARTICULATE MATTER	8a.	GR/SCF	b.	0.68	LB/HR	c. AP-42 Section 11.1	
CARBON MONOXIDE	9a,	PPM (VOL)	b.		LB/HR	c.	
NITROGEN OXIDES	10a.	PPM (VOL)	b.		LB/HR	с.	
ORGANIC MATERIAL	IIa.	PPM (VOL)	b.		LB/HR	c.	
SULFUR DIOXIDE	12a.	PPM (VOL)	b.		L8/HR	c.	
**OTHER (SPECIFY)	13a.	PPM (VOL)	b.	0.34	LB/HR	c. AP-42 Section 11.1 (PM-10)	

***OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

EARAUST FURT INFORMATIO	OINT INFORMATION	EXHAUST	
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1. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: N 19

DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): Vertical Stack 2.

3. EXIT HEIGHT ABOVE GRADE: 157 ft.	4. EXIT DIAMETER: 5 ft.
5. GREATEST HEIGHT OF NEARBY BUILDINGS: 135 feet	6. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 120 Ŋ.
AVERAGE OPERATION	MAXIMUM OPERATION
7. EXIT GAS TEMPERATURE: 212	9. EXIT GAS TEMPERATURE: 212
8. GAS FLOW RATE THROUGH EACH EXIT: 39,000 ACF	I0. GAS FLOW RATE THROUGH EACH EXIT: 41,000 ACFM

78/94

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL 1021 NORTH GRAND AVENUE. EAST SPRINGFIELD. ILLINOIS 62702

Page 79 of ig

* DATA AND INFORMATION

AIR POLLUTION CONTROL EQUIPMENT

THIS INFORMATION FORM IS TO BE COMPLETED FOR AN EMISSION SOURCE OTHER THAN A FUEL COMBUSTION EMISSION SOURCE OR AN INCINERATOR. A FUEL COMBUSTION EMISSION SOURCE IS A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED PRIMARILY FOR PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN INCINERATOR IS AN APPARATUS IN WHICH REFUSE IS BURNED.

I. NAME OF OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM
Lafrage Corporation	OWNER): Lafarge Corporation
3. STREET ADDRESS OF CONTROL EQUIPMENT:	4. CITY OF CONTROL EQUIPMENT
2150 E. 130 th Street	Chicago
5. NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM:	HES Dust Collector

INSTRUCTIONS

- 1. COMPLETE THE ABOVE IDENTIFICATION SECTION.
- 2. COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.
- 3. COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
- 4. EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.
- 5. EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OR THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO HE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.
- 6. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS AVERAGE - THE VALUE THAT <u>SUMMARIZES</u> OR <u>REPRESENTS</u> THE <u>GENERAL CONDITION</u> OF THE <u>EMISSION SOURCE</u>. OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES. MAXIMUM - THE GREATEST VALUE <u>ATTAINABLE</u> OR <u>ATTAINED</u> FOR THE <u>EMISSION SOURCE</u>, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES. This Agency is authorized to require this information under Illinois Revised Statutes, 1979. Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

			,			ج R 011026	30/9:
		COND	ENSER			— <i>r</i>	
1,	FLOW DIAGRAM DESIGNATION(S) OF CONDENSER:						
2.	MANUFACTURER: 3. MO	DEL NAME AN	D NUMBER:	4, HEAT	EXCHANGE ARE	A:	FT?
	AVERAGE OPERATION OF SOURCE		MA	XIMUM OPERA	TION OF SOURC	CE	
5.	COOLANT FLOW RATE PER CONDENSER: WATER GPM AIR SCI OTHER: TYPE, FLOW RATE	FM	10. COOLANT FLOW WATER OTHER: TYPE	RATE PER CO GPM A	NDENSER: NR LOW RATE	SCFM	
6.	GAS FLOW RATE:	SCFM	11. GAS FLOW RATE				SCFM
7.	COOLANT TEMPERATURE: 8. GAS TEMPERAT INLETºF OUTLETºF INLETºF OU	URE: UTLETºF	12. COOLANT TEMP INLET°F OI	ERATURE: JTLET°F	13. GAS TEMP INLET	ERATURE: _°F OUTLET_	٩F
9.	EFFICIENCY OF CONDENSER (SEE INSTRUCTION 4):	%	14. EFFICIENCY OF	CONDENSER (S	EE INSTRUCTIO)N 4):	%

	*ELECTRICAL PRECIPITATOR								
i.	FLOW DIAGRAM DESIGNATION(S) OF ELECTRICAL PRECIPITATOR	:							
2.	MANUFACTURER:	3.	MODEL NAME AND NUMBER:						
4.	4. COLLECTING ELECTRODE AREA PER CONTROL DEVICE: FT ²								
	AVERAGE OPERATION OF SOURCE		MAXIMUM OPERATION OF SOURCE						
5.	GAS FLOW RATĚ: SCFM	7.	GAS FLOW RATE: SCFM						
6.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %	8.	EFFICIENCY OF ELECTRICAL PRECIPITATOR(SEE INSTRUCTION 4) %						
5	SUBMIT THE MANUFACTURER'S SPECIFICATIONS FOR THE ELECTRE	CAL	PRECIPITATOR. REFERENCE THE INFORMATION TO THIS FORM.						

*ELECTRICAL PRECIPITATORS VARY GREATLY IN THEIR DESIGN AND IN THEIR COMPLEXITY. THE ITEMS IN THIS SECTION PROVIDE A MINIMUM AMOUNT OF INFORMATION. THE APPLICANT MUST, HOWEVER, SUBMIT WITH THIS APPLICATION THE MANUFACTURER'S SPECIFICATIONS, INCLUDING ANY DRAWINGS, TECHNICAL DOCUMENTS, ETC. IF THE INFORMATION PROVIDED BY THE MANUFACTURER'S SPECIFICATIONS IS INSUFFICIENT FOR FULL AND ACCURATE ANALYSIS, THE AGENCY WILL REQUEST SPECIFIC ADDITIONAL INFORMATION.

FILTER UNIT							
1. FLOW DIAGRAM DESIGNATION(S) OF FILTER UNIT: DC12							
2. MANUFACTURER: TBD	3. MODEL NAME AND NUMBER: TBD						
4. FILTERING MATERIAL: TBD	5. FILTERING AREA: TBD FT ²						
6. CLEANING METHOD:	OTHER: SPECIFY						
7. GAS COOLING METHOD: DUCT WORK: LENGTH	FT., DIAM IN.						
BLEED-IN AIR WATER SPRAY OTHER: SPECIFY N/A							
AVERAGE OPERATION OF SOURCE	MAXIMUM OPERATION OF SOURCE						
8. GAS FLOW RATE (FROM SOURCE): 95,000 SCFM	12. GAS FLOW RATE (FROM SOURCE): 100.000 SCFM						
9. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM, WATER SPRAY <u>N/A_</u> GPM	13. GAS COOLING FLOW RATE: BLEED-IN AIR <u>N/A_</u> SCFM. WATER SPRAY <u>N/A_</u> GPM						
10. INLET GAS CONDITION: TEMPERATURE <u>230</u> °F DEWPOINT <u><212</u> °F	14. INLET GAS CONDITION: TEMPERATURE 230 °F DEWPOINT <212 °F						
11. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %	15. EFFICIENCY OF FILTER UNIT (SEE INSTRUCTION 4): 99 %						

				AVERAGE	OPERATIO	N
CONTAMINANT	CONC	CENTRATION OR EMIS CONTROL UNITS OF	SION L CON	RATE PER ID TROL SYSTEM	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	2a.	GR/SCF	b.	1.9	LB/HR	c. AP-42 Section 11.1
CARBON MONOXIDE	3a.	PPM (VOL)	b.		LB/HR	с.
NITROGEN OXIDES	4a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	5a.	PPM (VOL)	b.		LB/HR	· C
SULFUR DIOXIDE	6a.	PPM (VOL)	b.		LB/HR	c.
**OTHER (SPECIFY')	7a.	PPM (VOL)	b.	0.95	LB/HR	c. AP-42 Section 11.1 (PNI-10)
	· · · · · · · · · · · · · · · · · · ·			MAXIMUN	1 OPERATIC	DN
CONTAMINANT	CON	CENTRATION OR EMIS CONTROL UNITS OF	SION R CON	RATE PER 1D TROL SYSTE	ENTICAL M	METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE
PARTICULATE MATTER	8a.	GR/SCF	b.	2.4	LB/HR	c. AP-42 Section 11.1
CARBON MONONIDE	9a.	PPM (VOL)	b.		LB/HR	с. ,
NITROGEN ONIDES	10a.	PPM (VOL)	b.		LB/HR	с.
ORGANIC MATERIAL	11a.	PPM (VOL)	b.		LB/HR	c
SULFUR	12a.	PPM	b.			c.

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D. DIOXIDE (VOL) LB/HR **OTHER PPM c. AP-42 Section 11.1 (PM-10) 13a. b. (SPECIFY) (VOL) 1.2 LB/HR ***OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER

CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

	EXHAUST PC	INT IN	FORMATION
1.	FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: N 25		
2.	DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO	BUILD	NNGS, DIRECTION, HOODING, ETC.): Vertical Stack
3.	EXIT HEIGHT ABOVE GRADE: 157 ft.	4.	EXIT DIAMETER: 8 ft.
5.	GREATEST HEIGHT OF NEARBY BUILDINGS: 135 feet	6.	EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 120 ft.
	AVERAGE OPERATION		MAXIMUM OPERATION
7.	EXIT GAS TEMPERATURE: 230	= 9.	EXIT GAS TEMPERATURE: 230 °F
8.	GAS FLOW RATE THROUGH EACH EXIT: 120,000 ACFN	1). GAS FLOW RATE THROUGH EACH EXIT: 130,000 ACFM

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R 011028

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL P. O. Box 19506 SPRINGFIELD, ILLINOIS 62794-9506

Page Sod or 94

	FOR AGENCY USE ONLY
PROCESS EMISSION SOURCE ADDENDUM	
TANK	

1. NAME OF OWNER:	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER):
Lafarge Corporation	Lafarge Corporation
3. STREET ADDRESS OF EMISSION SOURCE:	4. CITY OF EMISSION SOURCE:
4000 Town Center, Suite 2000	Chicago

ТА	NK INFORMATION
5. NAME OF TANK MANUFACTURER: Unknown at this time	6. DESIGNATION OF TANK: Grinding Aid
7. SERIAL NUMBER: Unknown at this time	8. CAPACITY: 10,000
9. TANK USE: Storage and feed tank for ball mill grinding aid.	10. NUMBER OF SAME CAPACITY TANKS STORING THE SAME MATERIAL: 1
11. TANK SHAPE:	
12. TANK DIAMETER: 13. TANK HEIGHT: 12 FT 8	14. TANK LENGTH: FT 16 FT
15. STATUS:	16. TANK TYPE: SIXED ROOF FLOATING ROOF
17. SEAL: SINGLE DOUBLE	18. AVERAGE DISTANCE FROM TOP OF TANK SHELL TO LIQUID: 4 FT
19. SHELL TYPE:	20. PAINT COLOR:

VENT VALVE DATA								
TYPE OF VENT	NUMBER OF VENTS	PRESSURE SETTING	DISCHARGE VENTED TO (ATMOSPHERE, FLARE, ETC.)					
21. COMBINATION	a	b	c					
22. PRESSURE	a	b	c					
23. VACUM	a	b	c					
24. OPEN	a. <u>1</u>	b. <u>N/A</u>	c. Atmosphere					

R 011029

"Page 83 of 94

	MATERIAL TO BE STORED		
25. MATERIAL: Grinding Aid	26. DENSITY:	LB/FT3	27. VAPOR PRESSURE AT 70 °F: PSIA

		STORAGE	CONFITIONS	
28.	STORAGE TEMPERATURE: MINIMUM <u>Amb(-20)</u> °F	MAXIMUM <u>Amb (95)</u> °F	29. TANK TURN OVER PER YEAR:	🔲 BBLS/ 🖾 GALS/
30.	MAXIMUM FILLING RATE:	🗋 BBLS/DAY 🖾 GALS/DAY	31. AVERAGE THROUGHPUT:	🗇 BBLS/DAY 🛛 GALS/DAY
32.	PRESSURE EQUALIZERS USED?	⊠ NO	33. PERMANENT SUBMERGED LOADING PIPE USED?	NO NO
34.	VAPOR LOSS CONTROL DEVICE	? IF VAPOR LOSS C CONTROL EQUIPM	DNTROL DEVICE IS USED, COMPLETE 'DATA & INFORMATIO IENT," (FORM APC-260, AS PART OF THIS APPLICATION	IN -AIR POLLUTION

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TANKS 4.0 Emissions Report - Summary Format Tank Identification and Physical Characteristics

Identification User Identification: City: State: Company: Type of Tank: Description:	Lafarge Grinding Aid Chicago Illinois Lafarge Horizontal Tank
Tank Dimensions	
Shell Height (ft):	18.00
Diameter Height (ft):	10.00
Volume (gallons):	10,000.00
Turnovers:	14.89
Net Throughput (gal/yr):	148,900.00
Is Tank Underground (y/n):	N
Is Tank Heated (y/n):	Ν
Paint Characteristics	
Shell Color/Shade:	White/White
Shell Condition:	Good
Breather Vent Settings	
Vacuum Settings (psig):	0.00
Pressure Settings (psig):	0.00

Meteorological Data used in Emissions Calculations: Chicago, Illinois (Avg Atmospheric Pressure = 14.38 psia)

TANKS 4.0 Emissions Report - Summary Format Liquid Contents of Storage Tank

	· – ·		÷ *		Liquid	~							
		_ Daily L	iquid Surf.		Bulk				Vapor	Liquid	Vapor		Baris (as Masas Brazerat
		Temperal	lures (deg F)		lemp.	Vapor H	ressures (psia)		Mal.	Mass	Mass	MOI.	Basis for vapor Pressure
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Мах.	Weight	Fract.	Fract	Weight	Calculations
Ethylene Glycol	All.	50.66	45.76	55.55	49 02	0.0004	0.0003	0.0005	62.0700			62.07	Option 1: A=8 0908, B=2088.9, C=203 5

85/94 R011031

Lafarge Grinding Aid Lafarge Horizontal Tank Chicago, Illinois

TANKS 4.0 Emissions Report - Summary Format Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)	· · · · · · · · · · · · · · · · · · ·
Components	Working Loss Breathing Loss	Total Emissions
Ethylene Glycol	0.09 0.06	0.15

R.011032 Page 3

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	FACSIMILE
Date: 10/30/00	Number of pages (including this one): 8
From: S. Tucker	To: Rancy
Ph: (618) 543-398 Fax: (618) 543-3990	Ph: Fax:

PROJECT:

REMARKS:

MSDS for FM gundaid MTDA-B

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CEMENT GROUP/U.S. REGION/JOPPA PLANT 2500 Portland Rd., Grand Chain, IL 62941 Office: (618) 543-7541 Fax: (618) 543-7393

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M. 62	2 Whittem	ore Ave.			Alax, Ontario,	<u>, LIS 3</u> C6		
02 C2	ambridge.	MA 02140) . Number (Por Inform	nation and Emerg	<u>gericy Res</u>	92002	
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				81	lend of Glycols	and Amin	162	
9	<u>Chemical</u>	Names and	L FAMLLY:	Ci	ement, Clinker.	Grinding	Compound	
	Product U	se:		M	1xture-Not Appl	ICADIE		
	<u>POT MULA</u>				TATURE /NA			
	CAS# (Che	emical Ab:	<u>stract Servic</u>	<u>e)</u> : M	1XIUKE/IIA			
	•		[ma	enertation/I	lazard Classificatio	98		
			LCBU States DOT			<u>Canadian Re</u>	gulations	
		PRING: Not /	Apolicable		IDG CLASS:	Not Applica	1016	
	NAME	Y' 'Y'	••					
	HAZARD CLA	<u>55:</u>	Not Applicable					
	IDENTIFICA	<u>TION #:</u>	Not Applicable					
	LABEL(S) B	EQUIRED:	NOT APPTICANTE			Out add as	Compound	
\sim	Surface	Freight (lassificatio	ni Co	ement, Clinker.	Granding) Compound	
				Ľ	iquid, N. U. S.			
		c uses d	Index :	o H	ealth: 3	*		
	NPCA-MMI	S Mazaro	INVER -	o F	lammability: 1			
				O R	eactivity: 0	ton B		
				o P	ersonal Protect			
					(See Section o		· · · · · · · · · · · · · · · · · · ·	
			DOGIS THERED	FILTS/IDE	TITY INFORMATIC	21		
	SECTION	2 - 0040						
						14 D==	ICro Ptc.	
	INGRED	IENT			TOXICITY DAT	IN LU50.	2050 000	
	(Che	mical Nam	ne.	7. D. 14	(See Section	n <u>IX for</u>	Exposure Limit:	<u>s)</u>
	<u>CAS#</u>	<u>& Comm</u>	NAME)	FOLLOWING	G INGREDIENTS:			
	CONTAL	NS ONE DE	TUNE VE 105	20 (max) LD50 (Oral,	Rat) 2	710 mg/Kg	
	A_3-r	DIVIN	nolamine					
	Amine	h Trietha						
	Amine (wit CAS	ch Triethi # 102-71-	-6 and Higher	Amine)	1 D- (0-3)	Rat)	12,600 mg/Kg	
	Amine (wit CAS Glycer	th Triethi 5# 102-71- rine CAS#	-6 and Higher :56-81-5	Amine) 10 (max) LD_{50} (Oral,	Rat) Rat)	12,600 mg/kg ∠ 300 mg/kg	
	Amine (wit CAS Glycei Glyco	th Triethi 5# 102-71- rine CAS# 1 Blend	-6 and Higher :56-81-5	Amine) 10 (max 100 (max #) LD ₅₀ (Oral,) LD ₅₀ (Oral,	Rat) Rat)	12,600 mg/kg 2 300 mg/kg	
	Amine (wit CAS Glycer Glyco (vit	th Triethi 5# 102-71- rine CAS# I Blend th Ethyle:	-6 and Higher :56-81-5 ne Glycol CAS	Amine) 10 (max 100 (max 100 (max 100 (max) LD ₅₀ (Oral,) LD <u>50</u> (Oral,	Rat) Rat)	12,600 mg/kg ≱ 300 mg/kg	
	Amine (wit CAS Glycer Glyco (wit 10	th Triethi 5# 102-71- r ine CAS# 1 Blend th Ethyle: 7-21-1. D 5# 111-46	-6 and Higher :56-B1-5 ne Glycol CAS tethylene Gly -6 and Higher	Amine) 10 (max 100 (max ;# ;col 61ycols)) LD ₅₀ (Oral,) LD ₅₀ (Oral,	Rat) Rat)	12,600 mg/kg 2 300 mg/kg	
	Amine (wit CAS Glyce Glyco (wit 10 CA Mirod	th Triethi 5# 102-71- rine CAS# 1 Blend th Ethyle: 7-21-1. D S# 111-46 Higher G	-6 and Higher :56-B1-5 ne Glycol CAS iethylene Gly -6 and Higher i lycolamines	Amine) 10 (max 100 (max ## /col 61ycols) 50 (max) LD ₅₀ (Oral,) LD ₅₀ (Oral,	Rat) Rat)	12,600 mg/kg ≥ 300 mg/kg ~700 mg/kg	

		990 LAF2	ARGE_ENGINEERING	11:15 11:15 12:003
	+617 (GRACE CONSTRUCT	UN	Page 2 of R,011035 80
	R-B7660	MATERIAL SALET		·
			CTEDISTICS	
;	SECTION 3 - PHYSICAL DATA Boiling Point: >400°F/2	OS*C	Specific Gravity(H2	0=1) 1.1-1.2
	Vapor Pressure (mm Hg.) <	:0.1 @ 68*F	<u>% Volatiles</u>	30% Max(As Water)
	<u>Vapor Density(AIR = 1)</u> 3.	66	<u>Evaporation_Rate</u> (Butyl_Acetate = 1)	Unknown
	Solubility in Nater: Comp	olete	рH	7-12
	<u>Bulk Density (#/cu.ft)</u> :	Not Applicable		
	Appearance and Odor: Dark typ	k brown or wate Ical glycol (an	ry-white liquid with iti-freeze) odor.	
	Odor Threshold: Not determined for finit	shed product		
	SECTION 4 - FIRE AND EXP Flash Point: >255*F/124 Method Used: Tag Closed	LOSION HAZARD D *C Cup	ATA Flammable Limits: LEL Unknown UEL	Unknown
	<u>N.F.P.A. Rating</u> : H-1 Extinguishing Med	F-1 R-0	a) cohol foam.	
,	Special Fire Fighting Pr Water or Hydrocar	<u>'ocedures</u> 'bon-type foam i	may cause frothing.	
	<u>Unusual Fire and Explosi</u> None known	ion Hazards		
	SECTION 5 - REACTIVITY D Stable under normal cond Conditions or Material Strong oxidizing	ATA litions (yes or ls to avoid (wh agents, acids.	<u>no):</u> YES ich may react or cause	instability):
	<u>Hazardous Decomposition</u> Carbon Dioxide, (<u>or Byproducts</u> : Carbon Monoxide	, Ammonia, Nitrogen O	xides
	<u>Hazardous Polymerization</u> Will not occur.	ם:		
	<u>Conditions to Avoid</u> : None known.			

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LAFARGE ENGINEERING 06/30/00 10:58 FAX 618 543 3990

+617 GRACE CONSTRUCTION

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R 011036

R-87660 * *

NATERIAL SAFETY DATA SHEET

SECTION 6 - HEALTH HAZARD DATA & TOXICOLOGICAL PROPERTIES.

Routes of Exposure:

Inhalation: Not expected to occur under typical use conditions. However, if specific use generates a mist, inhalation may be slightly irritating to the linings of the upper respiratory tract causing coughing and sore throat.

Skin and Eve:

EYE contact will cause severe burns and tissue damage. Vapor can cause irritation and corneal edema which may result in the perception of a "Blue Haze" around lights. Prolonged SKIN contact will cause irritation resulting in redness and swelling. Moderate to severe burns may result in some cases. Repeated skin contact may cause skin sensitization in a small portion of persons, resulting in an allergic reaction such as rash or hives. Product can be absorbed through the skin upon prolonged contact resulting in systemic effects such as nausea, headache and general discomfort.

Ingestion:

Harmful or fatal if ingested. If ingested, may cause nausea, diarrhea, vomiting, pulmonary edema (due to lung aspiration) sterility, kidney damage, coma or death. Repeated ingestion of small amounts may cause liver and kidney damage. Tumorigenic, mutagenic and reproductive effects have been reported for Diethylene Glycol CAS# 111-46-6 and Glycerine CAS# 56-81-5 based on laboratory animal studies.

Carcinggenicity According to NTP, IARC and OSHA: Not Applicable.

SECTION 7 -	ENERGENCY AND FIRST ALD PROCEDURES
EYE:	In case of contact, immediately flush eyes with plenty of running water for at least 15 minutes lifting eyelids
SKIN:	frequently. See a physician immediately. Flush exposed skin with plenty of water promptly. Consult a physician. Remove and wash contaminated clothing before
INGESTION:	reuse. If swallowed, call a doctor or polson control center immediately. Decision to induce vomiting should be made by a physician. Never give anything by mouth to an
INHALATION:	unconscious person. If irritation due to inhalation develops, get fresh air. If symptoms persist, consult a physician.

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	K=01000					R 01103
	SECTION 8 - PREVI	NTIVE & CONTRO	I MEASURES		<u> </u>	
	Marning Statements WARNING! MAY BE I Contains one of Glycol Blend (Diethylene Gl; CAS# Mixture Amines), Mixed S6-81-5, Sodi Polyglycerine Ingestion of Irritating to Skin contact tization may Overexposure productive ef	ATAL IF SWALLO FATAL IF SWALLO or more of the CAS# Mixture (w ycol CAS# 111-4 (with Triethand d Higher Glycol um Lactate CAS# s CAS# 25618-55 large amounts (eyes upon cont causes irritat occur in certat by ingestion m fects and live	DWED. CAUSES SKIN AND following ingredients with Ethylene Glycol C 46-6 and Higher Glycol clamine CAS# 102-71-6. 1amines CAS# 68909-77- # 72-17-3, Sodium Sait 5-7, Water CAS# 7732-1 can be fatal. tact. May cause eye i ion with burns possibl in individuals. ay cause tumorigenic. r/kidney damage.	EYE IRRITATION. AS# 107-21-1, s), Amine Blend and Higher 3, Glycerine CAS# (a) CAS# 7647-14-5, 8-5. (a) CAS# 7647-14-5, 10 CAS# 7647-14-5,		
	Precautionary Mea Avoid contact Wear safety of Wash exposed Do not swallo Keep containe For professio	sures: with eyes, sk lasses or gogg skin thoroughl ow or taste. er tightly clos onal use only.	in and clothing. les and imporvious glo y after handling. ed when not in use. Keep out of children	oves when handling. 's reach.		
\bigcirc	Respiratory Prot Respiratory pro respiratory irr NIOSH-approved (prefilter for m	<u>action</u> : tection is not Itation develop organic vapor r ists is recomme	generally required. os due to inhalation o respirator (Type TC-23 anded.	However, if if vapor or mist, a iC-X)(X) with a		
	<u>Ventilation</u> : Local Exhaust: Nechanical: Special:	Not generally Not generally Not Applicable	required. required. 0			

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SECTION 8 - PREVENTIVE & CONTROL MEASURES CONTINUED	
Skin Protection: Impervious rubber or synthetic gloves should be worn to a skin contact.	ainimize
Eve Protection: Safety glasses or goggles should be worn to guard against and to prevent eye contact.	t splashing
<u>Other Protective Clothing or Equipment:</u> Wear appropriate clothing to prevent skin contact.	
<u>Mork/Hygienic Practices:</u> Use good hygiene practices and observe above precautions	
o Do not add acids to this product. Reaction products	that are itory List

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not included on the Toxic Sul will be formed. o Do not add nitrites to this product. Cancer causing nitrosamines may be formed.

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	R-8766		TERIAL SAFETY DATA SH	EET	Page 6 of 7 C(3)(4)
	SECTION	9 - HAZARDOUS INGRED	DIENTS EXPOSURE LINITS	- U.S. Only Exposure Limits	01HER
1	INGREDIE GLYCERII CAS#	II: NE (AS MIST) 00056-81-5	<u> </u>	10 mg/#3 - TWA	None Established
	GLYCOL CAS#	BLEND 00107-21-1(AS ETHYLENE	50ppm - Ceiling GLYC)	50ppm - Ceiling	SKIN-
	MIXED G CAS#	12700LAMINES 68909-77-3	None Established	None Established	None Established
	TRIETH/ CAS#	NOLAMINE 00102-71-6	None Established	5.0 ppm - 1WA	None Established

SECTION 10 - SPILL & DISPOSAL INFORMATION - U.S. Only

Prevent product from entering drinking water supplies or streams. Observing above precautions, absorb with an inert, noncombustible material and place into closed containers for disposal. For large spills, dike area and pump waste material into closed containers for disposal or reclamation.

Spill reporting requirements vary by region. Consult MSDS Section 11 and applicable state and local regulations.

According to the EPA (40 CFR 261.3) waste of this product is not defined as hazardous. Consult local and state regulations to determine if their definition of hazardous waste differs from the US EPA. Dispose of all waste in accordance with all applicable regulations.

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SECTION 11 - GOVERNMENT REPORTING INFORMATION - U. S. Only		R 011040
SARA Title III Reporting Information <u>Tier I & II Hazard Categories:</u> DELAYED (CHRONI IMMEDIATE (ACUT	C) HEALTH E) HEALTH	
<u>Contains Extremely Hazardous-SARA III Section 302 Ingredi</u> <u>Comments:</u>	<u>ent:</u> NO	
<u>Contains Toxic Chemical Release-SARA III Section 313 Ingr</u> <u>Comments:</u> Contains up to 10% Ethylene Glycol CAS# 107	<u>edient:</u> YES 1-21-1: REPORTABLE	
<u>Other Government Reporting Requirements:</u>		
<u>Non-Házardous Ingredient Disciosure:</u> May contain Polyglycerines, Water, Sodium Lactate and Sod	ium Salts.	
SECTION 12 - PRODUCT IDENTIFICATION/TRADENAME ADDENDUM The information contained in this Material Safety Data She	et is applicable to	-

MTDA (All Formulations Except CB)

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"THE DATA INCLUDED HEREIN ARE PRESENTED ACCORDING TO W. R. GRACE & CO.-CONN'S PRACTICES CURRENT AT THE TIME OF PREPARATION HEREOF, ARE MADE AVAILABLE SOLELY FOR THE CONSIDERATION, INVESTIGATION AND VERIFICATION OF THE ORIGINAL RECIPIENTS HEREOF AND DO NOT CONSTITUTE A REPRESENTATION OR WARRANTY FOR WHICH GRACE ASSUMES LEGAL RESPONSIBILITY. IT IS THE RESPONSIBILITY OF A RECIPIENT OF THIS DATA TO REMAIN CURRENTLY INFORMED ON CHEMICAL HAZARD INFORMATION, TO DESIGN AND UPDATE ITS OWN PROGRAM AND TO COMPLY WITH ALL NATIONAL, FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS APPLICABLE TO SAFETY, OCCUPATIONAL HEALTH, RIGHT-TO-KNOW AND ENVIRONMENTAL PROTECTION."

SEE LARGE FORMAT MAP OR PLAN SHEET

DESCRIPTION:

 Site #:
 031600FHQ

 Cat #:
 03M

 Date:
 11/08/2000

 Permit #:
 00080028

 Log #:
 Keyword:

 Comment:
 2491052

	Type or Description	SEE COLOR	Date of Plan	Figure/Diagram
1.	PROPOSED PLOT PLAN FOR NEW SLAG GRINDING FACILITY	N	03/26/2000	110.00.40 925393
2.	MECHANICAL PROCESS FLOWSHEET SLAG DRYING & GRINDING SYSTEM	N	03/26/2000	110.00.40 925409
3.		N		
4.		N		
`5				
6.				
7.				
8.				

IL 532-2702 LPC 602 5/2008



R 011042
Lafarge Midwest, Inc.

Project Description - Slag Processing Project

August 2000

Project Overview

Lafarge Midwest, Inc. is proposing to construct and operate a slag processing operation and modify the existing terminal by adding barge and ship loading capabilities at the South Chicago Terminal site, which is located on the Calumet River at 2150 E. 130 Street.. When the project is completed, the terminal site will have the capability to receive, handle, and dry up to 850,000 tons of wet granulated blast furnace slag. New equipment will also be installed to provide the ability to load cement and dry ground slag into barges and ships.

The dried slag will be ground in a ball mill, stored, and loaded out to trucks, barges and ships. Lafarge intends to produce a maximum of 744,600 tons per year of dry ground slag at the South Chicago site. The total throughput for the existing silos will remain at the currently permitted capacity of 1,600 tons per hour (14,016,000 tons per year), with as much as 744,600 tons per year being dried ground slag. The truck loadout capacity will also remain at the permitted level of 880 tons per hour (7,710,000 tons per year). The capacity of the ship loading system will be 600 tons per hour (5,256,000 tons per year). The capacity of the barge loading system will be 500 tons per hour (4,380,000 tons per year).

Granulated blast furnace slag is a byproduct of steel manufacturing facilities. It is created in a granulator at the foot of a blast furnace. In the granulator, molten slag is injected into a water spray bath to fracture the slag into granules and cool the slag. Granulated slag produced by the steel industry is wet and has the consistency of a coarse sand. Because of the chemical and physical properties of this slag (high silica, calcium, alumina and magnesium content), and the case of grinding slag to a fine powder in ball mills, it is commonly used as an additive in several types of cement.

Operational Concept

The wet granulated blast furnace slag will be transported to the terminal in trucks. The anticipated source of the slag is a nearby steel plant, which ensures that the slag will be received in a wet state. The typical moisture content of the slag will be approximately 12 percent. When received, the slag will be dumped into a 30-ton hopper (M01) from the haul trucks. The hopper will feed the wet granulated slag onto a conveyer belt system that will transfer the material into a 1,000-ton day bin. From the day bin, the slag will travel across a weigh belt (N02) and onto the dryer feed belt (N03), which will transfer the slag into the feeder for the dryer. See Process Flow Diagram 1.

The slag will be partially dried in a co-flow shaft dryer that will be fired with natural gas. Exiting the dryer, the slag will be separated from the gas stream by a cyclonic separator (N08). The particulate matter in the gas stream exiting the cyclone will be collected with the use of a fabric filter dust collector (DC10).