



## DEPARTMENT OF NATURAL RESOURCES

## MISSOURI AIR CONSERVATION COMMISSION

## PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **012013-005**Project Number: 2012-08-060  
Installation Number: 186-0044

Parent Company: Holcim (US) Inc.  
Parent Company Address: 201 Jones Road, Waltham, MA 02451  
Installation Name: Holcim (US) Inc. - Ste. Genevieve Plant  
Installation Address: 2942 US Hwy 61, Bloomsdale, MO 63627  
Location Information: Ste. Genevieve County, S9, T39N, R07E

Application for Authority to Construct was made for:  
Barge loading and dust collection modification. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

- 
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JAN 11 2013

EFFECTIVE DATE

  
\_\_\_\_\_  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2012-08-060

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

Holcim (US) Inc. - Ste. Genevieve Plant  
Ste. Genevieve County, S9, T39N, R07E

1. Control Device Requirement-Baghouse
  - A. Holcim (US) Inc. - Ste. Genevieve Plant shall control emissions from 641 Bulk Loading Barges 1 and 642 Bulk Loading Barges 2 (four spout replacements) using baghouses as specified in the permit application.
  - B. The permittee shall not emit more than 0.004 grains per dry standard cubic foot (DSCF) of particulate matter from these baghouses.
  - C. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications.
  - D. One complete set of replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
  - E. Holcim (US) Inc. - Ste. Genevieve Plant shall monitor visible emissions (VE) in accordance with the requirements of PCMACT at 40 CFR §63.1350 (i.e. monthly visible emission observations with appropriate follow up in the event of VE is observed).
  - F. Holcim (US) Inc. - Ste. Genevieve Plant shall include the spout loading equipment and associated baghouses in the Operations and Maintenance Plan as required by PCMACT.
2. Record Keeping and Reporting Requirements
  - A. Holcim (US) Inc. - Ste. Genevieve Plant shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

Page No.	4
Permit No.	
Project No.	2012-08-060

**SPECIAL CONDITIONS:**

The permittee is authorized to construct and operate subject to the following special conditions:

- B. Holcim (US) Inc. - Ste. Genevieve Plant shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2012-08-060  
Installation ID Number: 186-0044  
Permit Number:

Holcim (US) Inc. - Ste. Genevieve Plant  
2942 US Hwy 61  
Bloomsdale, MO 63627

Complete: August 23, 2012

Parent Company:  
Holcim (US) Inc.  
201 Jones Road  
Waltham, MA 02451

Ste. Genevieve County, S9, T39N, R07E

REVIEW SUMMARY

- Holcim (US) Inc. - Ste. Genevieve Plant has applied for authority to modify the barge loading (four loading spouts) and associated dust collection system to improve performance.
- HAP emissions are not expected from the proposed equipment.
- Portland cement plants are not among the source types regulated by 40 CFR Part 61, the National Emission Standards for Hazardous Air Pollutants (NESHAPs).
- The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart LLL, *National Emission Standards for the Portland Cement Manufacturing Industry* applies to the proposed equipment.
- This type of installation (Portland Cement Plant) is on the "List of Named Installations" found at 10 CSR 10-6.020 subsection (3)(B), Table 2.
- Baghouses are being used to control particulate matter emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. The controlled potential emissions of particulate matter are conditioned below de minimis levels.
- This installation is located in Ste. Genevieve County, an attainment area for all criteria pollutants. Part of Jefferson County is a nonattainment area for lead. This installation is not located in the Jefferson County lead nonattainment area.

- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels and no appreciable change in off property air quality is expected.
- A Part 70 Operating Permit application revision is required for this project within one (1) year of equipment startup.
- Approval of this permit is recommended with special conditions.

## INSTALLATION DESCRIPTION

Holcim is a large cement manufacturer in the United States, with eleven (11) Portland cement plants currently operating across the country. Holcim is a wholly owned subsidiary of Holcim Ltd. of Switzerland. Holcim operates its Ste. Genevieve Plant, a new Portland cement manufacturing facility, east of the township of Danby in Ste. Genevieve County, Missouri.

The Ste. Genevieve Plant employs approximately 220 personnel, and have an annual clinker production capacity of 4,828,074 tons. Based on present specifications in the United States, the Ste. Genevieve Plant has an annual Portland cement production capacity of 5,082,183 tons. Operational units that will accommodate this level of production include an on-site quarry, raw material storage, crushing and milling, solid fuel (coal and petroleum coke) storage and milling, liquid fuel storage, one preheater/precalciner cement kiln system, product milling, product storage, and loading and unloading systems.

Cement manufacturing involves chemical and physical processing of large quantities of raw materials. The raw materials used include sources of calcium, silica, alumina and iron. These are the components necessary for the manufacture of the cement chemicals dicalcium silicate, tricalcium silicate, tricalcium aluminate, and tetra-calcium aluminoferrite. The raw feed is prepared for use in the kiln system by sizing, grinding and blending the various raw materials to produce the necessary mix for quality production. The prepared raw feed is introduced to the kiln system where it is physically and chemically transformed into cement clinker, the intermediate product of Portland cement. In the kiln system, the raw materials are exposed to temperatures reaching up to 3,500° F through a countercurrent process in the kiln and a co-current process in the preheater. The raw materials are heated to 2,650° F, the temperature required to produce quality clinker.

Raw materials utilized for cement kiln feed at the Lee Island plant will be supplied from both on-site and off-site sources. Quarry resources include limestone and shale deposits that will comprise part of the raw material blend to become clinker, the principal product. Holcim will receive other raw materials from off-site suppliers at the Lee Island plant by rail, truck, and barge via the Mississippi River. Materials received from off-site may include limestone, iron ore, clay, bottom ash, fly ash, bauxite, diaspor, gypsum and other materials as necessary. An important source of raw materials is non-hazardous waste materials from other industries that have the proper chemical and physical properties to be used as a raw material source. The Ste. Genevieve Plant is

designed for, and plans to utilize, these types of materials as sources of calcium, silica, alumina and iron. Preparation of raw materials, depending on its source and physical properties, involves primary and secondary crushing, and screening, blending and grinding in the raw mills prior to entrance into the preheater tower of the cement kiln system.

Holcim uses coal and petroleum coke as the primary fuels for the cement manufacturing process at the Ste. Genevieve Plant. Holcim uses a single coal mill to prepare raw coal/coke for firing in the precalciner and the kiln. Solid fuels are at the facility by truck, rail, and river barge. Holcim does not utilize hazardous wastes at the facility.

Liquid oils and similar non-hazardous materials are used as a secondary fuel in critical situations such as start-up and back-up. The facility's equipment design also allows Holcim to beneficially use many other sources of energy bearing, non-hazardous waste materials to fuel the process. As an example, Holcim will use whole or shredded tires as a fuel supplement, when available. As other sources of fuel become available, Holcim will review their chemical and physical properties to assess their potential for providing the necessary thermal energy to the pyroprocess.

The preheater/precalciner pyroprocess is a state-of-the-art design that features five-stage cyclone-type preheater tower, low-NOx precalciners, and a rotary kiln. The preheater/precalciner portion of the system will be located in a tall tower adjacent to the kiln. The low-NOx precalciners will be located at the base of the tower. The precalciners allow the burning fuel to be thoroughly mixed with the kiln feed. Excess heated air from the clinker cooler (tertiary air) will provide combustion air for the precalciners. Preheater/precalciner kilns feature greater thermal efficiency as compared to long dry or long wet kilns. This results in significantly lower emissions and decreased fuel consumption per ton of clinker produced. To increase energy efficiency even further, hot exhaust gases from the preheater tower will be utilized to dry kiln feed in the raw mills and fuel in the coal mill.

Holcim will prepare cooled clinker product for distribution in the finish mill system, which employs four (4) vertical roller mills, dust collectors, material bins and feeders, and material handling equipment. The clinker will be mixed with gypsum and other additives, then ground to prepare Portland cement. The finished product will be loaded into trucks, railcars and barges for shipment to customers.

Virtually all areas of operation at the Ste. Genevieve Plant will incorporate emission controls that serve to prevent air pollutant emissions.

The following New Source Review permits have been issued to Holcim (US) Inc. - Ste. Genevieve Plant from the Air Pollution Control Program.

Table 1: Project History

Project#	Project Type	Status	Description
AP200310026	Banking Requests	ERC Request Approved	Procure ERC Credits
AP200312115	Banking Requests	ERC Request Approved	1.5 T VOC and 318.3T NOx
AP200401042	Banking Requests	ERC Request Approved	Receive 51 Tons VOC from Printpack
AP200401062	Banking Requests	ERC Request Approved	Receive 160 Tons VOC from Dow Chemical
AP200812055	Corrections & Amendments	Amendment Approved	As Built Changes to Original Construction Permit
AP200903079	Temporary or Pilot Plant Permit	Temporary Permit Issued	Crusher and Screen
AP200812062	Special Project	Special Project Complete	Haul Road Dust
AP201003038	Corrections & Amendments	Amendment Approved	NSR Request: Haul Road Operating Times
AP201010037	Applicability Determination Request	No Permit Required	Finish Mill Conveyors - reconfiguration
AP201101034	Corrections & Amendments	Amendment Approved	
AP201106039	Applicability Determination Request	No Permit Required	Tanks
AP201108047	Sec 5 & 6: Deminimis and Minor	Permit Issued	Track-Mounted Crusher
AP201208037	Applicability Determination Request	Permit Required	Barge Loading Spouts

## PROJECT DESCRIPTION

Holcim is proposing a project to improve the barge loading configuration and associated dust collection. The current design consists of two bucket elevators that service one of two barge load out system, or two telescoping spouts (the bow and stern of one barge), for a total of four spouts. Each spout is currently rated for approximately half of the bucket elevator capacity. However, in practice, due to the rake on the bow of the barge and the location of the spouts in proximity to the barge openings, it is necessary to load the majority (approximately 70%) of the cement through the stern hatch before starting to trim the barge bow to stern and port to starboard to ensure a stable load on the barge. These design limitations severely restrict the efficiency of the loading system. In addition, at it is difficult to consistently meet the design loading rates with the existing dust collection system.

Holcim is proposing to change the existing stationary spouts with rotary spout positioners that will suspend the spout from a sloping hopper positioned below a rotating beam. This configuration will allow the spout to be rotated in arc covering 320 degrees, thus positioning the spout in the most efficient loading position. The project also involves increases to the spout capacity to 1000 tph which will facilitate the loading of the bulk of the material at the stern. This change will require increasing the capacity of the existing dust collector to 7500 cfm.

Holcim is proposing to remove the existing loading spouts and associated dust collection and replace it with the new design of loading spout and dust collection. The plan is to upgrade the first spout late this year to ensure the desired results are achieved and remaining three spouts next year. Refer to Attachment A for diagrams of the two systems.

The original baghouses are the subjects of the BACT analysis performed as a part of the original Prevention of Significant Deterioration (PSD) permit review. Because of that, these replacement baghouses must comply with that BACT standard, NSPS or state requirement, whichever is more stringent. In this case, the BACT standard is more stringent.

Generally the two systems are very similar; however, there are a few specific differences in addition to the new spouts being able to be move in a 320 degree arc. They are:

- The addition of a small separate hood to extract fluidizing air from the airslide feeding (see Attachment A, FC16 Aeration Conveyor) the hopper before the product enters the spout. This is in contrast to the existing system that extracts air directly from the airslide inside the bag filter – which increases the potential for blinding the cartridges. Cement entering the new spout will be fully enclosed from the airslide until it reaches the barge.
- The lower end of the new spout will be fitted with a custom designed bell housing that surrounds the discharge point at a distance from the rubber strip 'skirt' fitted to the end of the spout. Fugitive dust splashing outside the strip skirt will be captured within the bell housing enclosure. This bell housing cannot presently be employed on the existing spouts because the geometry of many of the barges places the spout immediately alongside the adjacent open hatch cover. There is currently insufficient room for a bell housing to enter. The proposed system employs a rotary hopper allowing the spout to swing through a radius, providing room to clear the hatch, yet still move sideways to trim the barge.
- The existing dust collection system use cartridge filters. The new dust collectors will use bags as the filter media, with a guarantee to meet 0.004 grains per dscf.

## EMISSIONS/CONTROLS EVALUATION

The PM<sub>10</sub> emission estimate will be approximately 0.23 pounds per hour per loading spout (see Table 2 below). These emission estimates include the baghouse control devices, which are required as a condition of this permit. These baghouses are subject to the Standards of Performance for Best Available Control Technology (BACT), Particulate Matter less than 10 microns in diameter (PM<sub>10</sub>) [BACT] that the original baghouses were subject. Therefore, the potential to emit is the same as the original.

Table 2: Project PM<sub>10</sub> Emission Estimate

Dust Collector ID	Model ID	Existing Exhaust Flow Rate (dscf/min)	Outlet Grain Loading Rate (gr/dscf)	PM <sub>10</sub> Emission Rate (lb/hr)	Proposed Exhaust Flow Rate (dscf/min)	Outlet Grain Loading Rate (gr/dscf)	Proposed PM <sub>10</sub> Emission Rate (lb/hr)	Proposed Increase PM <sub>10</sub> Emission Rate (lb/hr)
641-BF3	BargeDC1	755.53	0.004	0.026	7,500.00	0.004	0.26	0.23
642-BF3	BargeDC1	755.53	0.004	0.026	7,500.00	0.004	0.26	0.23
641-BF4	BargeDC2	755.53	0.004	0.026	7,500.00	0.004	0.26	0.23
642-BF4	BargeDC2	755.53	0.004	0.026	7,500.00	0.004	0.26	0.23

The following table provides an emissions summary for this project. Existing potential emissions were taken from previous construction permit. The PM<sub>2.5</sub> potential to emit was estimated by using the ratio of reported actual emissions of PM<sub>10</sub> to PM<sub>2.5</sub>. This was done because in many cases the maximum hourly design rate and emission factor method is not applicable. This is due to the extensive use of baghouses and the tested (guaranteed) outlet grain emissions. Existing actual emissions were taken from the installation's 2011 MoEIS. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year, refer to Table 2).

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2011 MoEIS)	Potential Emissions of the Application (after existing equipment removal)	New Installation Conditioned Potential
PM	25.0	962.2 <sup>1</sup>	453.1	4.56 (0.92)	963.1
PM <sub>10</sub>	15.0	962.2 <sup>2</sup>	429.3	4.56 (0.92)	963.1
PM <sub>2.5</sub>	10.0	436.8 <sup>3</sup>	194.9	2.74 (0.55)	437.4
SOx	40.0	3,041	170.6	N/A	3,041
NOx With ICT	40.0	5,755 5,194	1,975.6	N/A	5,755 5,194
VOC	40.0	798	279.9	N/A	798
CO	100.0	14,488	943.3	N/A	14,488
HAPs <sup>4</sup>	10.0/25.0	125.8	40.8	N/A	125.8

<sup>1</sup> This is the total, not just the filterable portion. Filterable rate is 592.

<sup>2</sup> This is the total, not just the filterable portion. Filterable rate is 592.

<sup>3</sup> Estimated by using the reported ratio of PM<sub>10</sub> to PM<sub>2.5</sub> values.

<sup>4</sup> Does not include HAPs reported as VOC or PMs.

## PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of particulate matter are conditioned below the de minimis levels.

## APPLICABLE REQUIREMENTS

Holcim (US) Inc. - Ste. Genevieve Plant shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with the Specific Requirements, based on information submitted in the application, has been verified at the time this application was approved.

### GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

### SPECIFIC REQUIREMENTS

Table 4: Applicable Requirements

<b>Applicability for PM Emissions</b>						
<u>Emission Point</u>	<u>Emission Unit</u>	<u>Description</u>	<u>BACT</u>	<u>NESHAP LLL</u>	<u>10 CSR 10-6.220</u>	<u>10 CSR 10-6.400</u>
<b>641 Bulk Loading Barges 1</b>						
BargeDC1	641-06	Transfer from AS2 to AS4	X	X	X	X
	641-08	Retractable Bulk Barge Loading Spout LA2	X	X	X	X
<b>642 Bulk Loading Barges 2</b>						
BargeDC2	642-06	Transfer from AS2 to AS4	X	X	X	X
	642-08	Retractable Bulk Barge Loading Spout LA2	X	X	X	X

## STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

---

Randy E. Raymond  
New Source Review Unit

---

Date

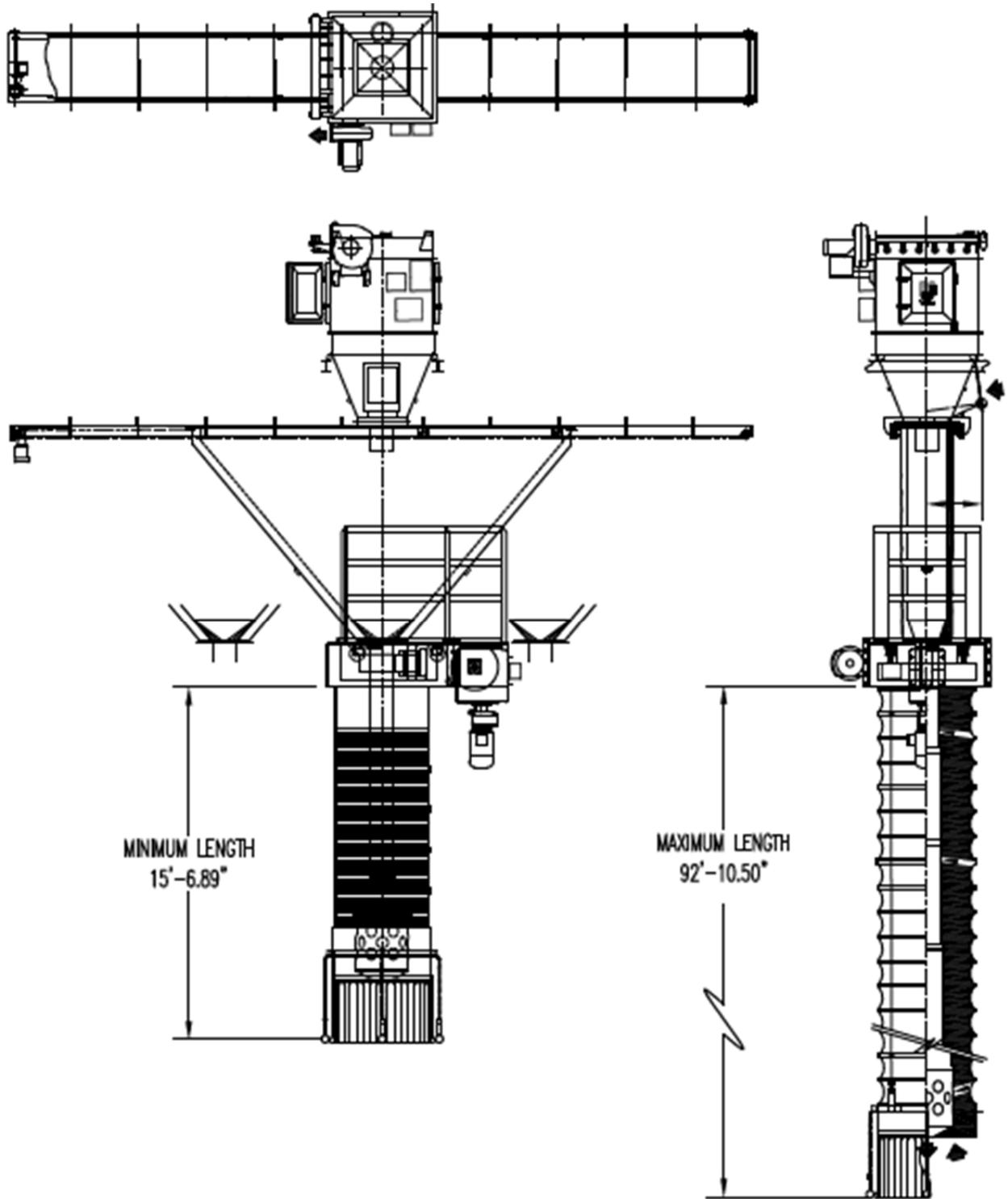
### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 23, 2012, received August 24, 2012, designating Holcim (US) Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

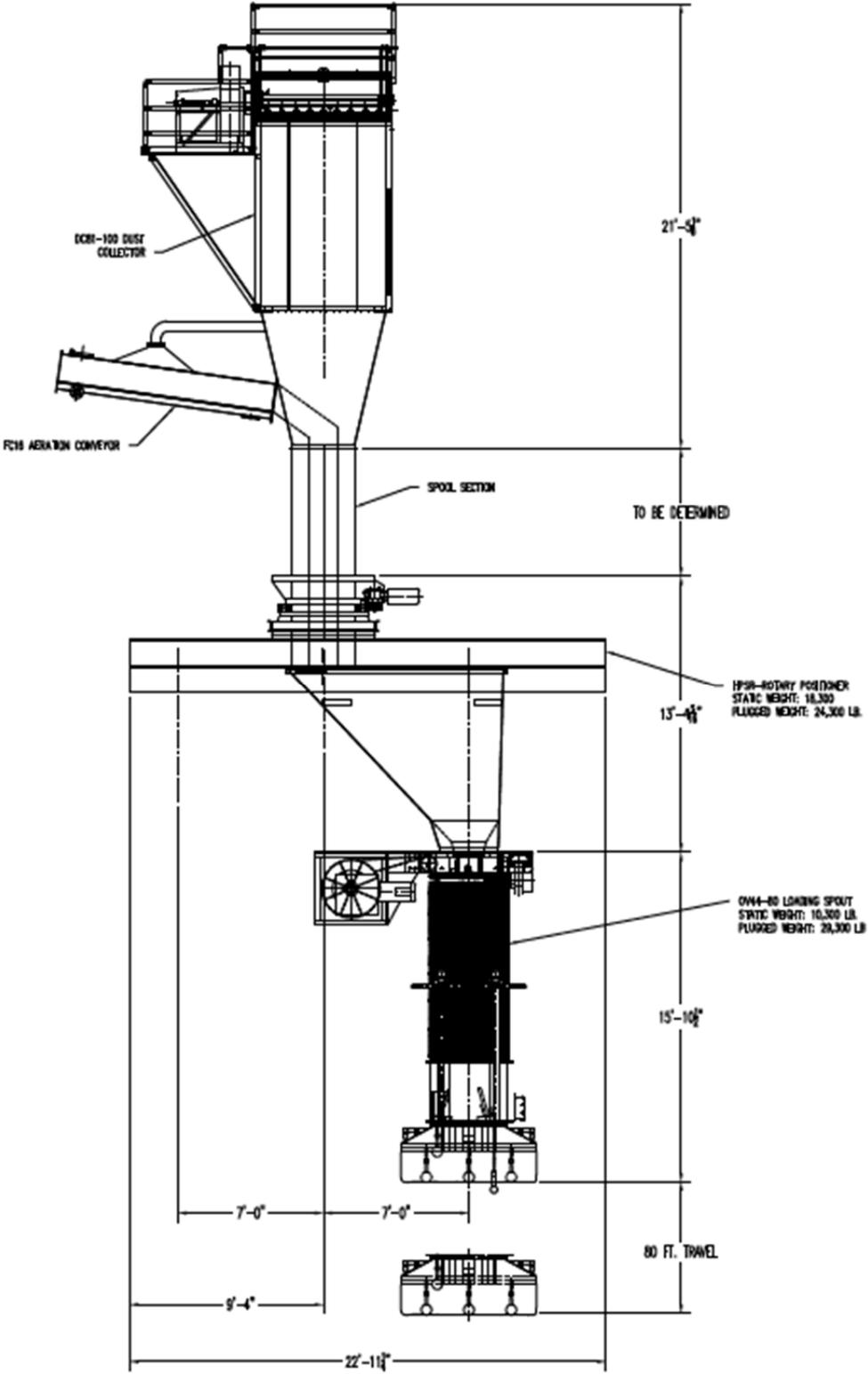
Attachment A – Comparison Diagram

Existing Load Spout



Attachment A – Continued

Proposed DCL Load Spout



## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>m/s</b> .....	meters per second
<b>°F</b> .....	degrees Fahrenheit	<b>Mgal</b> .....	1,000 gallons
<b>acfm</b> .....	actual cubic feet per minute	<b>MW</b> .....	megawatt
<b>BACT</b> .....	Best Available Control Technology	<b>MHDR</b> .....	maximum hourly design rate
<b>BMPs</b> .....	Best Management Practices	<b>MMBtu</b> ....	Million British thermal units
<b>Btu</b> .....	British thermal unit	<b>MMCF</b> .....	million cubic feet
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>MSDS</b> .....	Material Safety Data Sheets
<b>CAS</b> .....	Chemical Abstracts Service	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>NESHAPs</b>	National Emissions Standards for Hazardous Air Pollutants
<b>CFR</b> .....	Code of Federal Regulations	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CO</b> .....	carbon monoxide	<b>NSPS</b> .....	New Source Performance Standards
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>NSR</b> .....	New Source Review
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PM</b> .....	particulate matter
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CSR</b> .....	Code of State Regulations	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>dscf</b> .....	dry standard cubic feet	<b>ppm</b> .....	parts per million
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>EP</b> .....	Emission Point	<b>PTE</b> .....	potential to emit
<b>EPA</b> .....	Environmental Protection Agency	<b>RACT</b> .....	Reasonable Available Control Technology
<b>EU</b> .....	Emission Unit	<b>RAL</b> .....	Risk Assessment Level
<b>fps</b> .....	feet per second	<b>SCC</b> .....	Source Classification Code
<b>ft</b> .....	feet	<b>scfm</b> .....	standard cubic feet per minute
<b>GACT</b> .....	Generally Available Control Technology	<b>SIC</b> .....	Standard Industrial Classification
<b>GHG</b> .....	Greenhouse Gas	<b>SIP</b> .....	State Implementation Plan
<b>gpm</b> .....	gallons per minute	<b>SMAL</b> .....	Screening Model Action Levels
<b>gr</b> .....	grains	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>GWP</b> .....	Global Warming Potential	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>HAP</b> .....	Hazardous Air Pollutant	<b>tpy</b> .....	tons per hour
<b>hr</b> .....	hour	<b>tpy</b> .....	tons per year
<b>hp</b> .....	horsepower	<b>VMT</b> .....	vehicle miles traveled
<b>lb</b> .....	pound	<b>VOC</b> .....	Volatile Organic Compound
<b>lbs/hr</b> .....	pounds per hour		
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		

Ms. Michelle Ferguson  
Sr. Environmental Manager  
Holcim (US) Inc. - Ste. Genevieve Plant  
2942 US Hwy 61  
Bloomsdale, MO 63627

RE: New Source Review Permit - Project Number: 2012-08-060

Dear Ms. Ferguson:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Randy E. Raymond, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:rrl

Enclosures

c: Southeast Regional Office  
PAMS File: 2012-08-060

Permit Number: