

AIR EMISSION PERMIT NO. 12300353-003

Major Amendment

IS ISSUED TO

Lafarge North America

LAFARGE NORTH AMERICA - RED ROCK TERMINAL

1363 Red Rock Road

St. Paul, Ramsey County, Minnesota 55119

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are described in the Permit Applications Table.

This permit amendment supersedes Air Emission Permit No. 12300353-002 and authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Any additions or changes to conditions incorporated into Minnesota's State Implementation Plan (SIP) under 40 CFR § 52.1220, designated "Title I: SIP for PM₁₀" must go through the federal SIP approval process before becoming effective. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: State; Limits to Avoid Part 70 and NSR; Title I SIP Conditions - PM₁₀

Operating Permit Issue Date: April 14, 1998

Major Amendment Issue Date: July 16, 2010

Expiration Date: Permit does not expire – Title I Conditions do not expire.

Each new or revised condition designated "Title I Condition: SIP for PM₁₀" is not federally enforceable until approved by EPA as a SIP revision under Title I of the Clean Air Act.

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for Paul Eger
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit	September 19, 1995; October 27, 1997	001
Major Amendment	September 17, 2001	002
Major Amendment	November 18, 2009; April 13, 2010 supplement	003

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Lafarge North America – Red Rock terminal (facility) is a bulk cement transfer facility. The facility operates under a non-expiring state operating permit and receives, transfers, stores, and loads cement out to trucks. The facility is located in a “maintenance area” (formerly a nonattainment area) for particular matter less than 10 microns (PM_{10}). The facility PM_{10} emissions sources include seven fabric filter baghouses (pneumatic loading to silos, day bin, storage dome; silos, day bin and storage elevator; existing truck loadout spout 01; new truck loadout spout 02; the storage dome (next to); the storage dome (on top); and the auxiliary pneumatic unloading system). The fugitive emissions from the facility include cement truck traffic and employee parking lot traffic.

AMENDMENT DESCRIPTION

This is a major amendment to the state operating permit to add the pressure drop ranges (found in the approved July 2004 operation and maintenance plan) to the permit for the nine facility baghouses, and revises the minimum pressure drop required for one of the nine baghouses (CE 002). Also, a requirement has been added to the permit requiring a PM_{10} emissions test for any fabric filter that operates below the required minimum pressure drop after a change of the filter bags, within 45 days after resuming operation of the filter.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal
 Permit Number: 12300353 - 003

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: Total Facility

What to do	Why to do it
PM10 SIP REQUIREMENTS	hdr
Modeling for PM10: Any increase in PM10 emissions beyond modeled conditions associated with the emission units and stacks in the SIP shall be modeled at the new predicted PM10 emission rates to determine the impact on the NAAQS.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Remodeling for Attainment Demonstration: The Permittee shall submit to the Division Manager for approval any revisions of stack heights and other parameters relied upon in the modeling showing attainment with the PM10 NAAQS. The stack information submitted to the Division Manager shall include, at a minimum, the location and height of the stacks, nearby building dimensions, and the exit velocity and temperature of the gases emitted.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan(SIP)
The proposal shall be submitted no later than 90 days before beginning actual construction of the stack or associated emission unit.	
General Operating and Maintenance Requirements for SIP: The Permittee shall operate and maintain the process equipment described in Appendix B according to the parameters set forth in Appendix B. The parameters were used in the computer modeling performed to demonstrate that the Red Rock Road portion of the PM10 nonattainment area will attain compliance with the PM10 NAAQS.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping for SIP: Retain all records at the stationary source for a period of five (5) years from the date of the required monitoring or report that corresponds with a State Implementation Plan Title I Condition.	Title I Condition:Recordkeeping for the MN State Implementation Plan(SIP) for PM10 Requirements
Clamshell unloading system: The Permittee shall remove the clamshell unloading system by April 1, 1998.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Shutdown or Breakdown of Pollution Control Equipment: In the event of a shutdown or breakdown of pollution control equipment, The Permittee shall follow the shutdown and breakdown procedures found in Minn. R. 7019.1000.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Semiannual Deviations Report: due 30 days after end of each calendar half-year starting 04/14/1998. State Implementation Plan for PM10 shall be reported semiannually with the semiannual Deviations Report as required in this permit. Reporting for these conditions shall occur even if there were no deviations for the reporting period.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Permit Appendices: This permit contains appendices listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.	Minn. R. 7007.0800, subp. 2
OPERATIONAL REQUIREMENTS	hdr
Operation and Maintenance Plan: Retain at the stationary source the approved operation and maintenance plan. The plan dated July 15, 2004, was approved in writing by the agency on July 27, 2004, and is attached as appendix C to this permit.	Minn. R. 7007.0800, subps. 14 and 16(J)
If the fabric filter pressure drop range specified in table A of this permit does not coincide with the range specified in the O & M plan, the range specified in table A shall prevail.	
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
PERFORMANCE TESTING REQUIREMENTS	hdr
After replacement of the filter bags in any of the baghouses at the facility, the Permittee shall conduct a PM10 performance test on the fabric filter baghouse if the pressure drop is below the minimum pressure drop required by this permit for the baghouse. If a test is required, the test shall be conducted within 45 days after resuming operation of the baghouse.	Minn. R. 7017.200, subp. 1
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025, subp. 3
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
REPORTING/SUBMITTAL REQUIREMENTS	hdr
Shutdowns: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any process or control equipment if the shutdown would cause an increase in the emissions of any regulated air pollutant. At the time of notification, notify the Commissioner of the cause of the shutdown and the estimated duration. Notify the Commissioner again when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdowns: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emissions of any regulated air pollutant. At the time of notification or as soon thereafter as possible, the permittee shall also notify the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Oral Notification of Deviations Endangering Human Health or the Environment: As soon as possible after a discovery, notify the Commissioner orally or by facsimile of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Written Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: cause of the deviation; exact dates of the period of the deviation; if the deviation has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H)	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. The report shall be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: GP 001 Truck Traffic**Associated Items:** FS 006 Paved road emissions from cement/employee traffic & wind erosion emissions□□

FS 007 Paved road emissions from cement truck traffic only

FS 008 Paved road emissions from cement truck traffic only

FS 010 Paved road emissions from cement truck traffic and employee parking lot

What to do	Why to do it
Truck Traffic: less than or equal to 19,800 trucks/year using 12-month Rolling Sum	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Truck Traffic: less than or equal to 190 trucks/day	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Monitoring of Truck Traffic: The Permittee shall record and maintain records on site of the truck traffic per day and 12-month rolling sum of total truck traffic on a monthly basis.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping of Truck Traffic: The Permittee shall record on a daily basis the number of trucks per day.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping of Truck Traffic: The Permittee shall record the 12-month rolling sum of truck traffic by the 15th day of each month for the preceding month.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 001 Pneumatic Unloading to Silos 1 & 2, Day Bin, Storage Dome (EU 001/CE 001)**Associated Items:** EU 001 Pneumatic Unloading to Silos 1 & 2, Day Bin, Storage Dome

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 001 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 001 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 3.0 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Monitoring of pressure drop range: The Permittee shall observe and record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 001 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 001) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 001 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 001) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14
EU 001 and EU 014 Operation: EU 001 may only operate when EU 014 is not in operation. EU 014 and EU 001 may not operate simultaneously. The Permittee shall interlock the EU 001 and EU 014 fan motors so that they cannot be operated simultaneously.	Minn. R. 7007.0800, subp. 2
Recordkeeping of hours of operation: The Permittee shall record and maintain a record of the hours of operation of EU 001.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 002 Silos 1 & 2, Day Bin Storage Elevator (EU 002/CE 002)**Associated Items:** EU 002 Silos 1 & 2, Day Bin Storage Elevator

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 002 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 002 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 9.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Monitoring of pressure drop range: The Permittee shall observe and record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 002 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 002) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 002 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 002) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 003 Truck Loadout Spout 01 (EU 003/CE 003)**Associated Items:** EU 003 Truck Loadout Spout 01

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 003 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 003 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 3.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Monitoring of pressure drop range: The Permittee shall observe and record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 003 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 003) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 003 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 003) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-8**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 004 Storage Dome (next to) (EU 004/CE 004)**Associated Items:** EU 004 Storage Dome (next to)

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 004 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 004 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 6.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Pressure Drop Monitoring: The Permittee shall observe and record pressure drop once per day, if in operation. For nonoperating days, the record shall indicate no operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 004 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 004) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 004 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 004) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 005 Storage Dome (on top) (EU 005/CE 005)**Associated Items:** EU 005 Storage Dome (on top)

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1 (A)
SV 005 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 005 is considered to be in compliance with this requirement.	
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Monitoring of pressure drop range: The Permittee shall observe and record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 005 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 0052) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 005 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 005) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-10**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 011 Pneumatic Unloading System- Auxiliary Fabric Filter (EU 011/CE 011)**Associated Items:** EU 011 Pneumatic Unloading System- Auxiliary Fabric Filter

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than 0.010 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 011 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 011 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 3.0 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Recordkeeping of pressure drop range: The Permittee shall record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 011 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 011) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 011 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 011) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 012 Truck Loadout Spout 02 (EU 012/CE 012)**Associated Items:** EU 012 Truck Loadout Spout 02

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.020 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1 (A)
SV 012 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 012 is considered to be in compliance with this requirement.	
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 3.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Recordkeeping of pressure drop range: The Permittee shall record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 012 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 012) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 012 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 012) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 013 Pneumatic Unloader Vacuum Pump (EU 013/CE 013)**Associated Items:** EU 013 Pneumatic Unloader Vacuum Pump

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 013 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 013 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 6.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Recordkeeping of pressure drop range: The Permittee shall record pressure drop readings once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 013 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 013) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 013 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 013) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-13**

07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

Subject Item: SV 014 Silo #4 (EU 014/CE 014)**Associated Items:** EU 014 Silo #4

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
PM < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. SV 014 is controlled by a fabric filter which has a collection efficiency of 99.7 percent by weight, SV 014 is considered to be in compliance with this requirement.	Minn. R. 7011.0715, subp. 1 (A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1 (B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 5.0 inches of water column	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subp. 2
Recordkeeping of pressure drop range: The Permittee shall record pressure drop once per day, if in operation.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Recordkeeping: The Permittee shall record and maintain a monthly log of inspections of the baghouse filters and a description of any repairs or maintenance that took place.	Title I Condition: SIP for PM10 NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)
Visible Emissions: The Permittee shall check SV 014 for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4
Recordkeeping of Visible Emissions observations: The Permittee shall record the time and date of each visible emission inspection, and whether or not any visible emissions were observed.	Minn. R. 7007.0800, subp. 5
Periodic Inspections: At least once per calendar quarter, or as specified in the approved O&M plan, the Permittee shall inspect the fabric filter (CE 014) components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4, 5 and 14
Corrective Actions: The Permittee shall take corrective action prior to the following business day that EU 014 is operated, if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter (CE 014) or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5, and 14
EU 001 and EU 014 Operation: EU 014 may only operate when EU 001 is not in operation. EU 014 and EU 001 may not operate simultaneously. The Permittee shall interlock the EU 001 and EU 014 fan motors so that they cannot be operated simultaneously.	Minn. R. 7007.0800, subp. 2
Recordkeeping of hours of operation: The Permittee shall record and maintain a record of the hours of operation of EU 014.	Minn. R. 7007.0800, subp. 5

TABLE B: SUBMITTALS

B-1 07/16/10

Facility Name: Lafarge North America - Red Rock Terminal
Permit Number: 12300353 - 003

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

TABLE B: RECURRENT SUBMITTALS**B-2** 07/16/10

Facility Name: Lafarge North America - Red Rock Terminal

Permit Number: 12300353 - 003

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	<p>due 30 days after end of each calendar half-year starting 04/14/1998 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.</p> <p>If there are no deviations during a report period, the Permittee shall submit the report stating there are no deviations.</p>	Total Facility
Compliance Certification	<p>due 30 days after end of each calendar year starting 04/14/1998 (for the previous calendar year). Submit the certification on a form approved by the Commissioner. The certification covers all deviations experienced during the calendar year.</p>	Total Facility

APPENDIX MATERIAL

Facility Name: Lafarge Corporation - Red Rock Terminal

Permit Number: 12300353-003

Appendix B

Parameters Relied Upon in Modeling (from permit No. 12300353-001)

Source Name	Control Equipment	Emission Unit Number	SV ID	Stack Height (feet)	Stack Height (m)	Stack Dia. (feet)	Stack Dia. (m)	Stack Exit Velocity (m/s)	Flow Rate (acfm)	Exit Temp (F)	Exit Temp (K)	Grain Loading (gr/dscf)	Hours of Operation (hrs/yr)	PM ₁₀ Emission (lb/hr)
Pneumatic Unloading to Silos 1 & 2, Day Bin, Storage Dome	fabric filter (CE001)	1	001	65	19.8	2.58	0.79	12.60	13,000	105	314	0.020	8760	2.08
Silos 1 & 2, Day Bin, Elevator	fabric filter (CE002)	2	002	65	19.8	2.58	0.79	7.17	7,400	105	314	0.020	8760	1.19
Truck Loadout Spout 01	fabric filter (CE003)	3	003	45	13.7	1.92	0.58	4.40	2,500	105	314	0.020	8760	0.40
Truck Loadout Spout 02	fabric filter (CE012)	12	012	45	13.7	1.67	0.51	5.80	2,500	105	314	0.020	8760	0.40
Storage Dome (next to)	fabric filter (CE004)	4	004	65	19.8	2.7647	0.84	22.85	27,000	105	314	0.020	8760	4.33
Storage Dome (on top)	fabric filter (CE005)	5	005	80	24.4	1.00	0.30	18.14	2,800	105	314	0.020	8760	0.45
Pneumatic Unloading System - Auxiliary Fabric Filter	fabric filter (CE 011)	11	011	10	3.0	1.40	0.43	13.29	4,000	105	314	0.010	8760	0.32
Pneumatic Unloading System Vacuum Pump	fabric filter (CE 013)	13	013	6.5	2.0	1.44	0.44	29.22	9,386	105	314	0.010	8760	0.80
Pneumatic Unloading to Silo 4	fabric filter (CE 014)	14	014	105	32.0	2.20	0.67	16.70	12,500	105	314	0.010	8760	1.00

Appendix C

July 15, 2004 Operation and Maintenance Plan



LAFARGE NORTH
AMERICA - RED ROCK

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 12300353-003

This technical support document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 5032)
Mr. Gary Elliott, Regional Environmental Manager 2609 North 145 th Avenue East Tulsa, OK 74116 (918) 388-1155 gary.elliott@lafarge-na.com	Lafarge North America - Red Rock Terminal 1363 Red Rock Road Ramsey County St. Paul, Minnesota 55119-6012

1.2 Facility Description

Lafarge North America – Red Rock terminal (facility) is a bulk cement transfer facility. The facility operates under a non-expiring state operating permit and receives, transfers, stores, and loads cement out to trucks. The facility is located in a “maintenance area” (formerly a nonattainment area) for particular matter less than 10 microns (PM₁₀) and is subject to numerous state implementation plan (SIP) requirements to restrict PM₁₀ emissions. The facility PM₁₀ emissions sources include seven fabric filter baghouses (pneumatic loading to silos, day bin, storage dome; silos, day bin and storage elevator; existing truck loadout spout 01; new truck loadout spout 02; the storage dome (next to); the storage dome (on top); and the auxiliary pneumatic unloading system). The fugitive emissions from the facility include cement truck traffic and employee parking lot traffic.

1.3 Description of the Activities Allowed by this Permit Action

This is a major amendment to the state operating permit to add the pressure drop ranges (found in the approved July 2004 operation and maintenance plan (O & M plan)) to the permit for the nine facility baghouses, and revises the minimum pressure drop required for one of the nine baghouses (CE 002). Although this amendment revises (reduces) the permitted minimum CE 002 pressure drop, controlled emissions should readily achieve the applicable (0.02 gr/dscf) PM₁₀ limit with proper baghouse operation and maintenance. Also, a requirement has been added to the permit requiring a PM₁₀ emissions test for any fabric filter that operates below the required

minimum pressure drop after a change of the filter bags, within 45 days after resuming operation of the filter. Finally, the stack parameters used in modeling conducted for permit No. 12300353-001 were used to update the stack/vent data in the delta facility description.

1.4. Facility Emissions:

No emission changes are associated with or allowed by this permit action.

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		PM, PM ₁₀ , PM _{2.5}	
Part 70 Permit Program		PM ₁₀ , PM _{2.5}	

2. Regulatory and/or Statutory Basis

New Source Review

The facility is a non-major source under New Source Review and no changes to this status are authorized by this permit.

Part 70 Permit Program

The facility is an existing non-major source under Part 70 regulations. No changes to this status are authorized by this permit.

New Source Performance Standards (NSPS)

No New Source Performance Standards apply to this facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

No NESHAPS apply to this facility.

Compliance Assurance Monitoring (CAM)

CAM does not apply because the facility is not major for title V permitting purposes.

Environmental Review & AERA

Neither environmental review or an air assessment risk analysis are triggered by this action.

State Implementation Plan for PM₁₀

The facility is located in a PM₁₀ maintenance area that was formerly designated nonattainment. PM₁₀ limits apply to the fabric filter emissions from the facility. Also, truck and other vehicle traffic is limited to reduce ambient PM₁₀ impacts.

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

Table 3. Regulatory Overview of Units Affected by the Permit Amendment

Subject Item	Applicable Regulations	Comments:
SV 001 – SV 005 and SV 011 – SV 014	Title I Condition: SIP for PM ₁₀ NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP)	PM ₁₀ emissions limits, and control equipment monitoring, O&M, and recordkeeping requirements

3.1 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

The table below summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 4. Periodic Monitoring

Subject Item	Requirement (rule basis)	Additional Monitoring	Discussion
Total Facility	Minn. R. 7017.2020, subp. 1	Conditional PM ₁₀ test	A test is required on any baghouse within 45 days after the bags are changed and the pressure drop is below the required minimum.
SV 001 – SV 005 and SV 011 – SV 014	Title I Condition: SIP for PM ₁₀ NAAQS 40 CFR pt. 50 and MN State Implementation Plan (SIP) Minn. R. 7007.0800, subps. 4, 5, and 14	Daily pressure drop monitoring, recordkeeping, periodic inspections, and corrective actions	These are standard control fabric filter periodic monitoring requirements. The existing requirements were revised to match current delta guidance, except that corrective actions must be taken within one business day instead of as soon as possible, due to source culpability in the PM ₁₀ maintenance area.

3.2 Revisions to State Implementation Plan Requirements

The following table shows the revisions made to SIP requirements by this permit action.

Table 5. SIP Requirement Revisions

Requirement	Subject Item	Revision Description
O&M Plan submittal due 90 days after 04/14/1998	Total Facility	Removed completed requirement
Submit pressure drop operating range for the fabric filter for each emission source, due 90 days after permit issuance (04/14/1998)	SV 001 – 005, SV 011, and SV 012	Removed completed submittal requirement and inserted new requirement with specific pressure drop range for each fabric filter
Submit pressure drop operating range for the fabric filter for each emission source, due 90 days after permit issuance (05/14/2002)	SV 013 and SV 014	Removed completed submittal requirement and inserted new requirement with specific pressure drop range for each fabric filter
Submit vendor certification of performance due 30 days after 05/14/2002	SV 014	Removed completed requirement

4. Permit Fee Assessment

Attachment 2 to this TSD contains the assessment of Application and Additional Points used to determine the permit application fee for this permit action as required by Minn. R. 7002.0019. There are two components to a permit application fee; a base ‘application’ fee and the ‘additional points’ fee (for additional components that are part of a permit action including but not limited to modeling, BACT determination, NSPS review, etc.).

This permit action is a major amendment application received November 18, 2009 (after the July 1, 2009 rule effective date). Due to the scope of the application, no fees in addition to the base application fee are associated with this permit action.

4. Comments Received

Public Notice Period: May 10, 2010, - June 8, 2010.

No comments were received during the comment period.

5. Conclusion

Based on the information provided by Lafarge North America, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 12300353-003 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Marshall Cole (permit writer/engineer)
Brent Rohne (enforcement)
Shanda Fisher (stack testing)
Amrill Okonkwo (peer reviewer)

AQ File No. 2084; DQ #2909

Attachments: 1. Facility Description and CD-01 Forms
2. Permit Fee Calculation