

Lane Regional Air Protection Agency  
Simple Air Contaminant Discharge Permit (Simple-ACDP)

**REVIEW REPORT**

**Lafarge North America Inc.**  
90725 Highway 99 North  
Eugene, Oregon 97402

**Permit No. 204754**

1. **General Background Information**

Lane Regional Air Protection Agency (LRAPA) has reviewed the permit application received on May 19, 2017 from Lafarge North American Inc. (Lafarge or facility). The contents of the application were the basis for the contents within the review report.

Lafarge is a bulk cement distribution facility located at 90725 Highway 99 North, Eugene, Oregon. The facility terminated their LRAPA Simple "low" Air Contaminant Discharge Permit (ACDP) in August 2014, and consequently, had to apply for a new ACDP.

Though the facility terminated their ACDP in 2014, all equipment and control devices remained on the site. Lafarge can distribute approximately 60,000 tons of cement per year and approximately 200 tons per day. The facility unloads railcars with a boot lift into two (2) cement silos then loads trucks through a loading chute from the silos. There are three (3) High Energy Pulse Cleaned Cartridge dust collectors that control particulate matter (PM/PM<sub>10</sub>/PM<sub>2.5</sub>) emissions from the unloading of railcars and loading of trucks. The dust collectors control the particulate matter emissions by 99%. The operating schedule for the facility is 2,860 hours per year (11 hours per day, 5 days per week, 52 weeks per year).

2. **Emission Units Description**

Emission Unit	EU ID	Pollution Control Device	Control Device ID
Railcar Unloading and Truck Loading	EU-1	3 – Dust Collectors	DC-2, DC-3, & DC-4
Unpaved Roads	EU-2	NA	NA

3. **Reasons for Permit Issuance and Fee Basis**

The facility will be operating a process listed in LRAPA Title 37, Part B (B16. Cement Manufacturing and/or Distribution), and is, therefore, required to obtain permit. The facility is subject to the Simple "low" fee because the actual or expected emissions of PM<sub>10</sub> are less than 5 tons per year and actual or expected emissions of PM and PM<sub>2.5</sub> are less than 10 tons per year, each.

4. **Other Permits**

ACDP #204744 was issued initially to Lafarge in 2002 and was terminated in August 2014. No other permits have been issued or are required by LRAPA for this facility.

5. **Attainment Status**

This facility is located in a Maintenance Area for PM<sub>10</sub> and CO and an Attainment Area for all other criteria pollutants.

6. **Enforcement Actions**

There have been no enforcement actions taken on this facility.

7. **Plant Site Emission Limits (PSELs) Information**

The PSELs are set at the Generic PSEL levels in accordance with LRAPA Title 42-0040.

The facility is required to perform monthly recordkeeping to determine compliance with the PM, PM<sub>10</sub>, and PM<sub>2.5</sub> PSELs by keeping records of tons of bulk cement distributed per each dust collector.

**Annual PSELs**  
(tons)

Source	PM	PM <sub>10</sub>	PM <sub>2.5</sub>
Totals	24	14	9

\*Based on facility's application submittal, a throughput of 200 tons per day and 60,000 tons per year specified as the projected maximum amounts of bulk cement distribution. Total particulate emissions were estimated to be 5.4 tons/year. More information on emission estimations are found in the detail sheets attached to this review report.

8. **Performance, Operational and Work Practice Standards and Limitations**

The particulate emissions from the facility point stacks are required to not equal or exceed 20% opacity as a six (6) minute block average. The permit contains the applicable particulate matter limit in terms of the grain loading standards. [OAR 340-208-0110(4)]

The facility must take reasonable precautions to prevent particulate matter from becoming airborne. [OAR 340-208-0210(1) & (2)]

If requested by LRAPA, the facility is required to develop a fugitive emission control plan that will prevent any visible emissions from leaving the property of a source for more than 18 second in a six-minute period following the procedures of EPA Method 22. [OAR 340-208-0210(3)]

Dust collectors are required to be operated at all times when process equipment is operational and are required to be maintained. The facility is required to keep with records of dust collectors (DC-2, DC-3, & DC-4) maintenance for a period of five (5) years. [LRAPA 32-007]

9. **National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

There are no NESHAPs that are applicable to the facility at this time.

10. **New Source Performance Standards (NSPSs)**

There are no NSPSs that are applicable to the facility at this time.

11. **Typically Achievable Control Technology (TACT)**

LRAPA Title 32-008 requires a new emission unit at a facility to meet TACT if the emission unit has emissions of any criteria pollutants greater than one (1) ton per year, the emission unit is not subject to the standards under LRAPA Title 32, Title 33, Title 39, or Title 46 for the pollutants emitted, and the facility is required to have a permit. The cement distribution activities at this facility are required to meet TACT. A formal TACT determination has not been conducted for this facility. However, the dust collectors used by the facility likely meet LRAPA's TACT rules.

12. **New Source Review (NSR) and Prevention of Significant Deterioration (PSD)**

This facility is not subject to PSD for the affected criteria pollutants. The PSEs for the criteria pollutants are below the Significant Emission Rates (SERs) established in LRAPA Title 12. The facility is not subject to LRAPA's Prevention of Significant Deterioration (PSD) requirements for PM<sub>10</sub>, and PM<sub>2.5</sub>.

13. **Continuous Compliance**

A record of the following data is required to be maintained for a period of at least five (5) years at the plant site. [LRAPA 35-0160 and 42-0080].

Parameter (units)	Minimum Recording Frequency
a. Maintenance of dust collectors and record in a log	As Performed
b. Monitor pressure readings of each dust collector and record in a log	Weekly
c. Visual inspection of dust collectors for emissions	Weekly
d. Total throughput of cement for each dust collector (DC-2, DC-3, & DC-4)**	Monthly

\*\*As long as the facility does not exceed their permitted throughputs for each 12-month rolling period, they do not need to calculate PM emissions and include that calculation in their annual report.

14. **Reporting**

- a. An annual summary to document compliance with the Plant Site Emission Limits is required to be submitted by **February 15<sup>th</sup>** each year. The summary will contain the total annual bulk cement throughput data for each as required in Condition 13.d.
- b. The annual summary will also report any information as required per General Condition G15. [LRAPA 35-0160]

15. **Public Notice**

The draft permit was on public notice from June 16, 2017 to July 17, 2017. No written comments were submitted during the 30-day comment period.

**Emissions Factors and Calculations:**

**Total PM/PM<sub>10</sub>/PM<sub>2.5</sub> Emission for Facility:**

Emission Units	PM	PM10	PM2.5
Unloading/Loading	2.40	2.40	2.40
Unpaved Roads	2.97	0.91	0.27
<b>Totals</b>	<b>5.37</b>	<b>3.31</b>	<b>2.67</b>

**Railcar Unloading and Truck Loading: Using DEQ Emission Factor for Sanderdust with a Baghouse**

Lafarge America						
Permit No. 204574						
Railcars Unloading and Trucks Loading						
		Hourly Throughput (tons) <sup>1</sup>	Annual Throughput (tons)	Emission Factor (lb/ton) <sup>2</sup>	PM/PM <sub>10</sub> /PM <sub>2.5</sub> Short Term (lb/hr)	PM/PM <sub>10</sub> /PM <sub>2.5</sub> Annual Emissions (ton/year)
DC-2	Dust Collector 2	12	40,000	0.04	945	0.8
DC-3	Dust Collector 3	18	60,000	0.04	1,455	1.2
DC-4	Dust Collector 4	6	20,000	0.04	509	0.4
<b>Total</b>					<b>2,909</b>	<b>2.40</b>
1. Based on tons divided by 11 hours of operation						
2. DEQ Emission Factor for Sanderdust with Baghouse Control						

**Railcar Unloading and Truck Loading: Using Flow Rates of the Dust Collectors**

Railcars Unloading and Trucks Loading						
		Flow Rate (acfm) <sup>1</sup>	EF (gr/cfm)	Short Term (lb/hour) <sup>2</sup>	PM/PM <sub>10</sub> /PM <sub>2.5</sub> Short Term (lb/day) <sup>3</sup>	PM/PM <sub>10</sub> /PM <sub>2.5</sub> Annual Emissions (ton/year)
DC-2	Dust Collector 2	1,810	0.01	0.16	1.7	0.7
DC-3	Dust Collector 3	1,995	0.01	0.17	1.9	0.7
DC-4	Dust Collector 4	2,000	0.01	0.17	1.9	0.8
<b>Total PM/PM<sub>10</sub>/PM<sub>2.5</sub></b>				<b>0.50</b>	<b>5.47</b>	<b>2.18</b>
1. Flow rates are per manufacturer's specifications						
2. Where 1 pound of cement equals 7,000 grains.						
3. Pounds per day is based on 11 hours of operating						

**Emissions from Unpaved Roads:**

<b>Total PM/PM10/PM2.5 Emissions for Unpaved Roads</b>				
<b>VMT</b>	<b>1294</b>			
	<b>VMT</b>	<b>E (lb/VMT)</b>	<b>lb VMT/year</b>	<b>tons VMT/year</b>
PM-30	1294	4.60	5948.75	2.97
PM10	1294	1.41	1821.04	0.91
PM2.5	1294	0.42	546.31	0.27

