Lane Regional Air Protection Agency
Simple Air Contaminant Discharge Permit

Review Report

Lafarge PNW, Inc. **Permit No. 204754**
#300, 115 Quarry Park Road SE
Calgary AB T2C 5G9
Website: https://www.lafarge.ca/en

Source Information:

Primary SIC	5032 – Brick, Stone, and Related Construction Materials
Secondary SIC	--
Primary NAICS	423320 – Brick, Stone, and Related Construction Material Merchant Wholesalers
Secondary NAICS	--
Source Categories (LRAPA title 37, Table 1)	B.75: All other sources, both stationary and portable, not listed herein which would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons per year on direct $PM_{2.5}$ or PM_{10} if located in a $PM_{2.5}$ or PM_{10} nonattainment or maintenance area, or 10 or more tons per year of any single criteria pollutant if location in any part of Lane County
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

Unassigned Emissions	N	Source Test [date(s)]	N
Emission Credits	N	COMS	N
Special Conditions	N	CEMS	N
Compliance Schedule	N	Ambient monitoring	N

Reporting Requirements

Annual Report (due date)	February 15	Monthly Report (due dates)	N
SACC (due date)	N	Excess Emissions Report	Y
GHG Report (due date)	N	Other Reports (due date)	N
Quarterly Report (due date)	N		

Air Programs

NSPS (list subparts)	N	Prevention of Significant Deterioration (PSD)	N
NESHAP (list subparts)	N	Acid Rain	N
CAM	N	Clean Air Mercury Rule (CAMR)	N
Regional Haze (RH)	N	TACT	N
Synthetic Minor (SM)	N	>20 Megawatts	N
SM-80	N		
Title V	N		
Part 68 Risk Management	N		
Major FHAP Source	N		
Federal Major Source	N		
NA New Source Review (NSR)	N		

Permittee Identification

1. Lafarge PNW, Inc. ('the facility' or 'Lafarge') operates a bulk portland cement distribution facility at 90725 Highway 99 North in Eugene, Oregon.

General Background

2. The significant emission units at the facility include railcar unloading and truck loading. The facility unloads railcars with a boot lift into two (2) cement silos. Trucks are loaded through a loading chute from the silos. Particulate matter emissions from the unloading/loading operations are controlled with three (3) cartridge collectors. The facility also has fugitive emissions from unpaved roads.

3. The facility was constructed in 2002 and previously covered by Permit Number 204744. The facility requested termination of their ACDP in August 2014. The facility applied for a new ACDP to restart the facility in 2017. The restarted facility was assigned Permit Number 204754.

4. The facility was previously permitted under a Simple ACDP because LRAPA considered the facility to conduct an activity or source covered under Title 37, Table 1, Part B: 17 – cement manufacturing. The facility does not "manufacture" portland cement as this word is defined by the Merriam-Webster dictionary. Under earlier versions of Title 37, cement manufacturing was associated with SIC codes 3241 and 3251 – which are for establishments that manufacture hydraulic cement or brick and structural clay tile. LRAPA believes that this facility is more appropriately covered under Title 37, Table 1, Part B.75: All other sources, both stationary and portable, not listed herein which would have actual emissions, if the source were to operate uncontrolled, of 5 or more tons per year on direct $PM_{2.5}$ or PM_{10} if located in a $PM_{2.5}$ or PM_{10} nonattainment or maintenance area, or 10 or more tons per year of any single criteria pollutant if location in any part of Lane County.

Reasons for Permit Action and Fee Basis

5. This permit action is a renewal for an existing Simple Air Contaminant Discharge Permit (Simple ACDP) which was issued on July 18, 2017 and expired on June 18, 2022. As the facility submitted a timely renewal application on December 15, 2021, the expired permit will remain in effect until final action has been taken on the renewal application. Because the actual emissions for calendar year 2022 were less than 10 tons/year for each criteria pollutant, the permit action is considered a Simple "low" ACDP renewal under LRAPA 37-0064(2)(a).

Attainment Status

6. The facility is located in an area that has been designated as attainment or unclassified for all criteria pollutants. The facility is outside the Eugene-Springfield UGB as defined in LRAPA 29-0010 which designates the Eugene-Springfield carbon monoxide and PM_{10} maintenance areas. The facility is located inside the Eugene-Springfield UGB as described in the current Eugene-Springfield Metropolitan Area General Plan, as amended.

Permitting History

7. LRAPA has reviewed and issued the following permitting actions to this facility since 2007:

Date(s) Approved/Valid	Permit Action Type	Description
EI Number 204744		
05/22/2007 – 05/23/2012	Minimal ACDP	Renewal
05/08/2009	Addendum 1	Change permit type and fee basis to Simple "Low" ACDP
05/31/2012 – 05/31/2017	Simple ACDP	Renewal
08/2014	Termination	Simple ACDP terminated at the request of the facility

Date(s) Approved/Valid	Permit Action Type	Description
EI Number 204754		
07/18/2017 – 07/18/2022	Simple ACDP	Initial ACDP – facility applied to restart the facility
01/11/2018	Addendum 1	Name change – non-technical permit modification
Upon Issuance	Simple ACDP	Renewal

Compliance History

8. This facility has been inspected by LRAPA. The following table indicates the inspection history of this facility since 2007.

Agency	Type of Inspection	Date	Results
EI Number 204744			
LRAPA	Full Compliance Evaluation	09/18/2007	No areas of non-compliance discovered.
EI Number 204754			
LRAPA	Full Compliance Evaluation	10/19/2023	No areas of non-compliance discovered.

9. LRAPA has not issued any violation notices and/or taken enforcement action against this facility since at least 2007.

Source Testing

10. The facility is not required to conduct source testing at this time. LRAPA is not aware of any historical source testing conducted at this facility.

Emission Unit Description

11. The emission units regulated by this permit are the following:

EU ID	Emission Unit Description	PCD ID	Pollution Control Device Description	Installed / Last Modified
EU-1	Railcar Unloading and Truck Loading	DC-2 DC-3 DC-4	Baghouse #2 (slag) (2002) Baghouse #3 (truck loading) (2002) Baghouse #1 (cement) (2007)	2002
EU-2	Unpaved Roads	NA	None	2002

Significant Emission Units

12. Emission Unit EU-1

The facility operates railcar unloading and truck loading operations. The particulate matter from these operations is controlled by three (3) dust collectors. The permittee has determined potential particulate matter emissions from these operations based on an assumed maximum exit grain loading from each dust collector of 0.01 grains per actual cubic foot and the manufacturer's flow rate specification for each dust collector in actual cubic feet per minute. The permittee assumes that the emission rate of PM_{10} and $PM_{2.5}$ from each dust collector is equivalent to the particulate matter (PM) emission rate. The dust collectors operate intermittently when material from a silo is being loaded or off loaded. The facility has requested monitoring related to these dust collectors for compliance with the applicable visible emission and particulate matter standards be based on a periodic visible emissions inspection rather than through parametric monitoring.

13. Emission Unit EU-2

This process represents particulate matter emissions from unpaved roads on the property. Particulate matter emissions are calculated using the methodology in US EPA, AP-42, Section 13.2.2 – Unpaved Roads. The unpaved road emission factors for the PSELs are calculated assuming up to 120,000 tons of portland cement distribution.

Emission Limitations

14. The facility is subject to the general requirements for fugitive emissions under LRAPA 48-015. The facility must not have visible emissions that leave the plant site boundary for a period or periods totaling more than 18 seconds in a six (6) minute period. The facility must follow, but is not limited to, the list of reasonable precautions under LRAPA 48-015(1)(a)-(g). Compliance will be demonstrated through a survey of facility fugitive emissions using EPA Method 22 to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified. If requested by LRAPA, the facility must develop a fugitive emission control plan.

15. The facility is subject to the visible emission limitations under LRAPA 32-010(3). For sources, other than wood-fired boilers, no person may emit or allow to be emitted any visible emissions that equal or exceed an average of 20 percent opacity for a period or periods aggregating more than three (3) minutes in any one (1) hour. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or conduct a Modified EPA Method 9 test if the visible emissions cannot be eliminated. In addition, the permittee must prepare and maintain an Operation & Maintenance Plan for all particulate matter emission control devices at the facility.

    The non-fuel burning equipment at this source that emit particulate matter are subject to the following particulate matter emission limitations under LRAPA 32-015(2)(b)(B): For sources installed, constructed, or modified on or after June 1, 1970 but prior to April 16, 2015 for which there are no representative compliance source test results, the particulate matter emission limit is 0.14 grains per dry standard cubic foot. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or conduct a Modified EPA Method 9 test if the visible emissions cannot be eliminated. In addition, the permittee must prepare and maintain an Operation & Maintenance Plan for all particulate matter emission control devices at the facility.

16. Each emission unit at the facility is subject to the process weight rate emission limitations under LRAPA 32-045(1). No person may cause, suffer, allow, or permit the emissions of particulate matter in any one (1) hour from any process in excess of the amount shown in LRAPA 32-8010, for the process weight rate allocated to such process. Process weight is the total weight of all materials introduced into a piece of process equipment. Liquid and gaseous fuels and combustion air are not included in the total weight of all materials. Compliance is demonstrated through a plant survey of visible emissions using EPA Method 22 to be completed at least once a month. The permittee is required to take corrective action if any visible emissions are identified or conduct a Modified EPA Method 9 test if the visible emissions cannot be eliminated. In addition, the permittee must prepare and maintain an Operation & Maintenance Plan for all particulate matter emission control devices at the facility.

17. The control equipment at the facility must be operated and maintained at the highest and best practicable treatment and control of air contaminant emissions so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling, and other deleterious factors at the lowest possible levels under LRAPA 32-005(1). Compliance for the control equipment at the facility will be demonstrated through implementation of an Operation & Maintenance Plan.

18. Under LRAPA 49-020, the permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by LRAPA personnel. Compliance will be demonstrated by the permittee maintaining a log of each nuisance complaint received during the operation of the facility. A plant representative must immediately investigate the condition following the receipt of the nuisance complaint and provide a response to the complainant within 24 hours, if possible

Typically Achievable Control Technology (TACT)

19. LRAPA 32-008(2) requires new or modified emission units after 1/1/1994 to meet TACT if the emission unit meets the following criteria: The emission unit is not subject to Major NSR in title 38, Type A State NSR in LRAPA title 38, an applicable Standard of Performance for New Stationary Sources in title 46, or any other standard applicable only to new or modified sources in title 32, title 33, or title 39 for the regulated pollutant emitted; the source is required to have a permit; if new, the emission unit has emissions of any criteria pollutant equal to or greater than one (1) ton per year of any criteria pollutant; if modified, the emission unit would have an increase in emissions of any criteria pollutant equal to or greater than one (1) ton per year of any criteria pollutant; and LRAPA determines that the proposed air pollution control devices and emission reduction processes do not represent TACT.

19a. The PM, PM_{10}, and $PM_{2.5}$ emissions from Emission Unit EU-1 are controlled by three dust collectors and collectively exceed one (1) ton per year. While a formal TACT evaluation has not been performed for this emission unit, the use of dust collectors with a maximum exit grain loading of 0.01 grains per actual cubic foot would be expected to meet TACT.

19b. The particulate matter emissions from Emission Unit EU-2 are greater than one (1) ton per year. While a formal TACT evaluation has not been performed for this emission unit, the implementation of the list of reasonable precautions under LRAPA 48-015(1)(a)-(g) would be expected to meet TACT.

Plant Site Emission Limits (PSELs)

20. Provided below is a summary of the baseline emissions rate, netting basis, and PSELs for this facility.

Pollutant	Baseline Emission Rate (TPY)	Netting Basis		Plant Site Emission Limit (PSEL)		PSEL Increase Over Netting Basis (TPY)	Significant Emission Rate (TPY)
		Previous (TPY)	Proposed (TPY)	Previous PSEL (TPY)	Proposed PSEL (TPY)		
PM	NA	0	0	24	11	11	25
PM_{10}	NA	0	0	14	5.1	5.1	15
$PM_{2.5}$	NA	0	0	9	3.4	3.4	10
CO	NA	0	0	de minimis	de minimis	NA	100
NO_X	NA	0	0	de minimis	de minimis	NA	40
SO_2	NA	0	0	de minimis	de minimis	NA	40
VOC	NA	0	0	de minimis	de minimis	NA	40
GHG	NA	0	0	de minimis	de minimis	NA	75,000

20a. For criteria pollutants other than $PM_{2.5}$ and GHGs, the facility does not have a baseline emission rate because the facility was not in operation during either the 1977 or 1978 baseline year. A baseline emission rate is not established for $PM_{2.5}$ in accordance with LRAPA 42-0048(3). The facility has no baseline for GHGs because the facility did not request a baseline for this pollutant.

20b. The netting basis for all pollutants is 0 (zero) in accordance with LRAPA 42-0046(4).

20c. In accordance with OAR 340-222-0041(2), the PSELs for PM, PM_{10} and $PM_{2.5}$ have been set equal to the source's potential-to-emit (PTE). The previous PSELs for PM, PM_{10} and $PM_{2.5}$ were set at the Generic PSEL of 24 TPY, 14 TPY, and 9 TPY, respectively. No PSELs are set for NO_X, CO, SO_2, VOCs and GHGs in accordance with LRAPA 42-0020(3)(a) because these pollutants are emitted below the de minimis as defined in LRAPA title 12.

Federal Hazardous Air Pollutants/Toxic Air Contaminants

21. The facility is considered a natural minor or area source of federal HAPs. The potential emissions of federal HAPs at capacity are below the major source thresholds of 10 TPY of any single federal HAP and 25 TPY for the aggregate of federal HAPs. Based on current and previous permit applications and the nature of the facilities business, the facility is not considered a significant source of any federal HAPs.

22. Under the Cleaner Air Oregon program, only existing sources that have been notified by LRAPA and new sources are required to perform risk assessments. This source has not been notified by LRAPA and is, therefore, not yet required to perform a risk assessment or report annual emissions of toxic air contaminants. LRAPA required reporting of approximately 600 toxic air contaminants in 2016 and regulates approximately 260 toxic air contaminants that have Risk Based Concentrations established in the rule. All federal HAPs are on the list of approximately 600 toxic air contaminants. After the source is notified by LRAPA, they must update their inventory and perform a risk assessment to see if they must reduce risk from their toxic air contaminant emissions. Until then, sources will be required to report toxic air contaminant emissions triennially.

Toxics Release Inventory

23. The Toxics Release Inventory (TRI) is a federal program that tracks the management of certain toxic chemicals that may pose a threat to human health and the environment, over which LRAPA has no regulatory authority. It is a resource for learning about toxic chemical releases and pollution prevention activities reported by certain industrial facilities. Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) created the TRI program. In general, chemicals covered by the TRI program are those that cause:
    - Cancer or other chronic human health effects;
    - Significant adverse acute human health effects; or
    - Significant adverse environmental effects.

    There are currently over 650 chemicals covered by the TRI program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual TRI reports on each chemical. NOTE: The TRI program is a federal program over which LRAPA has no regulatory authority. LRAPA does not guarantee the accuracy of any information copied from EPA's TRI website.

    In 2022, this facility did not report any emissions to the TRI program. In order to report emissions to the TRI program, a facility must operate under a reportable NAICS code, meet a minimum employee threshold, and manufacture, process, or otherwise use chemicals in excess of the applicable reporting threshold for the chemical. This facility has not reported any emissions to the TRI program because they apparently do not manufacture, process, or otherwise use chemicals in excess of the applicable reporting thresholds.

New Source Performance Standards (NSPSs)

24. There are no emission units at this facility for which NSPS have been promulgated or are applicable. This facility is not subject to 40 CFR 60 subpart F – Standards of Performance for Portland Cement Plants because this facility does not manufacture portland cement by either the wet or dry process.

National Emission Standards for Hazardous Air Pollutants (NESHAPs)

25. There are no emission units at this facility for which NESHAPs have been promulgated or are applicable. This facility is not subject to 40 CFR 63 subpart LLL – National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry because this facility does not manufacture portland cement.

Recordkeeping Requirements

26. The facility is required to keep and maintain a record of the following information for a period of at least five (5) years.

Activity	Units	Minimum Recording Frequency
PSEL Recordkeeping		
Cement production.	Tons	Monthly
General Recordkeeping		
Log of nuisance complaints.	NA	Upon receipt of complaint
Fugitive Emission Survey.	NA	Monthly
Visible Emission Survey.	NA	Monthly
Operation and Maintenance Plan.	NA	Maintain the current version on-site
Upset Log of all planned and unplanned excess emissions, as required by Condition G15.	NA	Per occurrence

Reporting Requirements

27. The facility must submit to LRAPA the following reports by no later than the dates indicated in the table below:

Report	Reporting Period	Due Date
PSEL pollutant emissions as calculated according to Conditions 5 and 6 of the permit, including the supporting process information.	Annual	February 15
A summary of maintenance and repairs performed on any pollution control devices at the facility.	Annual	February 15
A summary of complaints from the public and the resolution, as applicable.	Annual	February 15
The upset log information required by Condition G13 of the permit, if required by Condition G13.	Annual	February 15

28. The permittee is not subject to greenhouse gas reporting under OAR 340 Division 215 because actual greenhouse gas emissions are less than 2,500 metric tons (2,756 short tons) of CO_2 equivalents per year. If the source ever emits more than this amount, they will be required to report greenhouse gas emissions.

Public Notice

29. Pursuant to OAR 340-216-0064(5)(a), which became effective on March 1, 2023, issuance of a renewed Simple Air Contaminant Discharge Permit requires public notice in accordance with OAR 340-209-0030(3)(c) [aka LRAPA 31-0030(3)(c)], which requires LRAPA to provide notice of the proposed permit action and a minimum of 35 days for interested persons to submit written comments.

The draft permit was on public notice November 28, 2023 to January 1, 2024. No comments were submitted during the 35-day comment period.

JJW/RR
10/25/2023

Emission Details

Lafarge - 204754
Emission Detail Sheets
Facility Potential Emissions Summary

Criteria Pollutant Emissions

PM (TPY)	PM10 (TPY)	PM2.5 (TPY)	NOx (TPY)	CO (TPY)	SO2 (TPY)	VOC (TPY)	GHG (TPY)
11	5.1	3.4	de minimis	de minimis	de minimis	de minimis	de minimis

Notes:
No FHAP / TAC emissions are reported for this facility.

Lafarge - 204754
Emission Detail Sheets
Unpaved Road Emission Calculations

Unpaved Road Emissions Based on Production

PM	0.13	lbs/ton of production
PM_{10}	3.2E-02	lbs/ton of production
$PM_{2.5}$	3.2E-03	lbs/ton of production
Production	120,000	tons/yr
Distance	0.58	miles

Truck Parameters			**Emissions**		
Truck (empty)	18.75	tons	PM	**7.52**	tons/yr
Haul Weight	46	tons	PM_{10}	**1.92**	tons/yr
Truck (full)	64.75	tons	$PM_{2.5}$	**0.19**	tons/yr

Pollutant	Constant k (lb/VMT)	Silt Content (%) s	Constant a	Constant b	Mean Vehicle Weight (tons) W	Emission Factor E (uncorrected) lb/VMT	# of Days ≥ 0.01 in. of precipitation	Emission Factor E (Corrected) lb/VMT
PM_{30}	4.9	4.8	0.7	0.45	41.8	8.44	150	**4.97**
PM_{10}	1.5	4.8	0.9	0.45	41.8	2.15	150	**1.27**
$PM_{2.5}$	0.15	4.8	0.9	0.45	41.8	0.22	150	**0.13**

Notes:
Emission estimation based on US EPA, AP-42, Section 13.2.2 - Unpaved Roads (11/06) for vehicles travel on unpaved surfaces at industrial sites.
Paved roads and paved parking lots within an urban growth boundary are considered "Categorically Insignificant Activities" according to the definition in LRAPA Title 12.
PM_{30} is assumed to be equal to total particulate matter.
Corrected for number of days with at least 0.01 inches of precipitation per year. P = 150 based on Figure 13.2.2-1.

Lafarge - 204754
Emission Detail Sheets
Loading/Unloading Emission Calculations

Emissions	Tons per year	Tons per month
PM	3.19	0.27
PM_{10}	3.19	0.27
$PM_{2.5}$	3.19	0.27

Control Device ID	Control Device Name	Flow Rate (acfm)	Emission Factor (gr/acf)	PM (TPY)	PM10 (TPY)	PM2.5 (TPY)
DC-2	Dust Collector 2	1,810	0.01	0.68	0.68	0.68
DC-3	Dust Collector 3	4,680	0.01	1.76	1.76	1.76
DC-4	Dust Collector 4	2,000	0.01	0.75	0.75	0.75
			Total =	**3.19**	**3.19**	**3.19**

Notes:
Flow rates per manufacture specifications.
Emission factor is assumed based on the age of the control devices.
7,000 grains = 1 pound.