



AIR OPERATING PERMIT

Puget Sound Clean Air Agency
110 Union Street, Suite 500
Seattle, Washington 98101

Issued in accordance with the provisions of Puget Sound Clean Air Agency (previously known as Puget Sound Air Pollution Control Agency) Regulation I, Article 7 and Chapter 173-401 WAC.

Pursuant Lafarge North America Inc is authorized to operate subject to the terms and conditions in this permit.

PERMIT NO.: 14046	DATE OF ISSUANCE: May 15, 2004 Modification Issued: July 28, 2004
ISSUED TO: Lafarge North America, Inc.	
PERMIT EXPIRATION DATE: May 15, 2009	

SIC Code, Primary: 3241 Hydraulic Cement Manufacturing
NAICS Code 32731 Hydraulic Cement Manufacturing
Nature of Business: Hydraulic Cement Manufacturing
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I. EMISSION LIMITS AND PERFORMANCE STANDARDS

The following tables list the citation for the “applicable requirement” in the second column. The third column (Date) contains the adoption or effective date of the requirement. In some cases, the effective dates of the Federally Enforceable Requirement and the State Only Requirement are different because only rules approved by EPA through Sections 110, 111, and 112 of the federal Clean Air Act are federally enforceable and either the state has not submitted the regulation to the EPA or the EPA has not approved it.

The first column is used as an identifier for the requirement, and the fourth (Requirement Paraphrase) column paraphrases the requirement. The first and fourth columns are for information only and are not enforceable conditions of this permit. The actual enforceable requirement is embodied in the requirement cited in the second and third columns.

The fifth column (Monitoring, Maintenance & Recordkeeping Method) identifies the methods described in Section II of the permit. Following these methods is an enforceable requirement of this permit. The sixth (Emission Standard Period) column identifies the averaging time for the reference test method. The last column (Reference Test Method) identifies the reference method associated with an applicable emission limit that is to be used if and when a source test is required. In some cases where the applicable requirement does not cite a test method, one has been added.

In the event of conflict or omission between the information contained in the fourth and sixth columns and the actual statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern. For more information regarding any of the requirements cited in the second and third columns, refer to the actual requirements cited.

A. FACILITY-WIDE APPLICABLE REQUIREMENTS

The requirements in this section apply facility-wide to all the emission units regulated by this permit.

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.1	<p>Puget Sound Clean Air Agency Reg I: 9.03 <i>This requirement will be superseded upon adoption of the 3/11/99 version of Reg I: 9.03 into the SIP</i></p> <p><i>Puget Sound Clean Air Agency Reg. I: 9.03 (State Only) This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/08/94 version of Reg I: 9.03</i></p>	<p>09/08/94</p> <p>03/11/99</p>	<p>Visible Emissions</p> <p>Shall not emit more than 20% opacity for a period or periods aggregating more than 3 minutes in any 1-hour period</p>	<p>II.A.1(a) General Visual Opacity Monitoring</p> <p>II.A.1(c) Facility-Wide Inspections</p> <p>II.A.1(f) Recordkeeping, Facility-wide General Requirements</p>	<p>More than 3 min. in any 1 hr</p>	<p>Ecology Method 9A (See Section X)</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.2	<p>WAC 173-400-040(1) <i>This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-040(1) into the SIP</i></p> <p>WAC 173-400-040(1) <i>(State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-040(1)</i></p>	<p>09/20/93</p> <p>9/15/01</p>	<p>Visible Emissions</p> <p>Shall not emit more than 20% opacity for more than 3 minutes in any 1-hour period</p>	<p>II.A. 1(a) General Visual Opacity Monitoring</p> <p>II.A.1(c) Facility-Wide Inspections</p> <p>II.A.1(f) Recordkeeping, Facility-wide General Requirements</p>	<p>More than 3 min. in any 1 hr</p>	<p>Ecology Method 9A (See Section X)</p>

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I.A.3	<p>Puget Sound Clean Air Agency Reg. I: 9.09(a) <i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.09 upon its adoption into the SIP</i></p> <p>Puget Sound Clean Air Agency Reg I: 9.09 <i>(State Only)</i> <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 2/10/94 version of Reg I: 9.09(a)</i></p>	<p>02/10/94</p> <p>04/09/98</p>	<p>Shall not emit particulate matter in excess of 0.05 gr/dscf from equipment used in a manufacturing process uncorrected for excess air</p>	<p>II.A.1(a) General Visual Opacity Monitoring</p> <p>II.A.1(c) Facility-Wide Inspections</p> <p>II.A.1(f) Recordkeeping, Facility-wide General Requirements</p>	<p>At least 1-hr per run</p>	<p>Puget Sound Clean Air Agency Method 5 (See Section X)</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.4	<p>WAC 173-400-060 <i>This requirement shall be superseded by the 9/15/01 version of WAC 173-400-060 upon its adoption into the SIP</i></p> <p>WAC 173-400-060 <i>(State Only)</i> <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 3/22/91 version of WAC 173-400-060.</i></p>	<p>3/22/91</p> <p>9/15/01</p>	<p>Shall not emit particulate matter in excess of 0.10 gr/dscf from general process units, uncorrected for excess air</p>	<p>II.A.1(a) General Visual Opacity Monitoring</p> <p>II.A.1(c) Facility-Wide Inspections</p> <p>II.A.1(f) Recordkeeping, Facility-wide General Requirements</p>	<p>At least 1-hr per run</p>	<p>EPA Method 5 (40 CFR Part 60, Appendix A, July 1, 2001)</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.5	<p>Puget Sound Clean Air Agency Reg I: 9.07</p> <p>WAC 173-400-040(6) first paragraph only. <i>This requirement shall be superseded by the 9/15/01 version of WAC 173-400-040(6) upon its adoption into the SIP</i></p> <p>WAC 173-400-040(6) (State Only). <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/93 version of WAC 173-400-040(6)</i></p>	<p>04/14/94</p> <p>09/20/93</p> <p>9/15/01</p>	<p>Shall not emit SO₂ in excess of 1,000 ppmv (dry) corrected to 7% O₂ for fuel burning equipment</p>	<p>No monitoring required</p>	<p>At least 1-hr per run</p>	<p>EPA Method 6C (40 CFR Part 60, Appendix A, July 1, 2001)</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.6	<p>Puget Sound Clean Air Agency Reg I: 9.11 <i>This requirement will be superseded upon adoption of the 3/11/99 version of Reg I: 9.11 into the SIP</i></p> <p>WAC 173-400-040(5) <i>This requirement will be superseded upon adoption of the 12/23/00 version of WAC 173-400-040(5) into the SIP</i></p> <p>Puget Sound Clean Air Agency Reg I: 9.11 <i>(State Only)</i> <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 6/9/1983 version of Reg I: 911(a).</i></p>	<p>06/09/83</p> <p>09/20/93</p> <p>03/11/99</p>	<p>Shall not emit air contaminants in sufficient quantities and of such characteristics and duration as is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property</p>	<p>II.A.1(a) General Visual Opacity Monitoring</p> <p>II.A.1(b) Complaint Response</p> <p>II.A.1(c) Facility-Wide Inspections</p> <p>II.A.1(d) General Fugitive Dust</p> <p>II.A.1(e) Maintenance and repair of insignificant emission units</p> <p>II.A.1(f) Recordkeeping, Facility-wide General Requirements</p>	<p>NA</p>	<p>NA</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.6 (cont.)	WAC 173-400-040(5) <i>(State Only). This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/93 version of WAC 173-400-040(5)</i>	9/15/01				
I.A.7	WAC 173-400-040(2) <i>(State Only)</i>	9/15/01	Shall not deposit particulate matter beyond property boundary in sufficient quantity to interfere unreasonably with the use and enjoyment of the property	II.A.1(a) General Visual Opacity Monitoring II.A.1(b) Complaint Response II.A.1(c) Facility-Wide Inspections II.A.1(d) General Fugitive Dust II.A.1(e) Maintenance and repair of insignificant emissions units II.A.1(f) Recordkeeping Facility-wide General Requirements	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.8	WAC 173-400-040(4) <i>(State Only)</i>	9/15/01	Must use recognized good practice and procedures to reduce odors which may unreasonably interfere with any other property owners' use and enjoyment of their property	II.A.1(b) Complaint Response II.A.1(c) Facility-Wide Inspections II.A.1(e) Maintenance and repair of insignificant emissions units II.A.1(f) Recordkeeping Facility-wide General Requirements	NA	NA
I.A.9	Puget Sound Clean Air Agency Reg. I: 9.15(a) <i>This requirement shall be superseded by the 3/11/99 version of Reg. I: 9.15(a) upon its adoption into the SIP</i>	8/10/89	Must employ BACT for fugitive dust	II.A.1(a) General Visual Opacity Monitoring II.A.1(c) Facility-Wide Inspections II.A.1(d) General Fugitive Dust II.A.1(f) Recordkeeping, Facility-wide General Requirements	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.11	Puget Sound Clean Air Agency Reg. I: 9.15(b) and 9.15(c) <i>This requirement shall be superseded by the 3/11/99 version of Reg. I: 9.15(a) upon its adoption into the SIP</i>	8/10/89	Must employ measures to prevent track-out and spillage of particulate matter on paved public roadways Shall not emit fugitive dust from any fuel burning equipment, equipment used in a manufacturing process, or control equipment	II.A.1(a) General Visual Opacity Monitoring II.A.1(c) Facility-Wide Inspections II.A.1(d) General Fugitive Dust II.A.1(e) Maintenance and repair of insignificant emission units II.A.1(f) Recordkeeping, Facility-wide General Requirements	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.12	Puget Sound Clean Air Agency Reg. I: 9.15(a) <i>(State Only)</i> <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 8/10/98 version of Reg. I: 9.15 into the SIP</i>	3/11/99	It shall be unlawful for any person to cause or allow visible emissions of fugitive dust unless reasonable precautions are employed to minimize the emissions. Reasonable precautions include, but are not limited to, the following: (1) The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds; (2) Surfacing roadways and parking areas with asphalt, concrete, or gravel; (3) Treating temporary, low-traffic areas (e.g., construction sites) with water or chemical stabilizers, reducing vehicle speeds, constructing pavement or rip rap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways; or (4) Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials	II.A.1(a) General Visual Opacity Monitoring II.A.1(c) Facility-Wide Inspections II.A.1(d) General Fugitive Dust II.A.1(f) Recordkeeping, Facility-wide General Requirements	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.13	Puget Sound Clean Air Agency Reg. I: 9:20	6/09/88	Must maintain equipment in good working order	II.A.1(c) Facility-Wide Inspections II.A.1(d) General Fugitive Dust II.A.1(e) Maintenance and repair of insignificant emission units II.A.1(f) Recordkeeping, Facility-wide General Requirements	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.14	<p>Puget Sound Clean Air Agency Reg. I: 7.09(b) <i>This requirement shall be superseded by the 9/10/98 version of Reg. I: 7.09(b) upon its adoption into the SIP</i></p> <p>Puget Sound Clean Air Agency Reg. I: 7.09(b) <i>This requirement will become federally enforceable and will no longer be effective in this table upon the adoption of the 9/10/98 version of Reg. I: 7.09(b) into the SIP</i></p>	9/12/96	Must develop and implement an O&M Plan to assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II and III	<p>II.A.1(c) Facility-Wide Inspections</p> <p>II.A.1(e) Maintenance and repair of insignificant emission units</p> <p>II.A.1(f) Recordkeeping, Facility-wide General Requirements</p> <p>II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements</p>	NA	NA
I.A.15	WAC 173-400-040	09/20/93	Emissions from a common stack must meet the most restrictive standard of any of the connected emissions units	NA	NA	NA
I.A.16	Puget Sound Clean Air Agency Reg. I: 9.10(a) (State Only)	06/09/88	Shall not emit HCl in excess of 100 ppm (dry) corrected to 7% O ₂ for combustion sources	No monitoring required	At least 1-hr per run	EPA Method 26 (40 CFR Part 60, Appendix A; July 1, 2001)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
I.A.17	RCW 70.94.040 (<i>State Only</i>)	1996	Shall not emit air contaminants in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property or cause a violation of RCW 70.94 or any regulation adopted hereunder	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	NA	NA

NA = Not Applicable

B. EMISSION UNIT SPECIFIC APPLICABLE REQUIREMENTS

The requirements in Section I.B. only apply to the specific emission units cited; however, the requirements in Section I.A. also apply. If the monitoring and recordkeeping method for any requirement in Section I.A. was more extensive for specific emission units, the requirement was repeated in this section with the additional monitoring and recordkeeping requirements.

1. Emission Unit #1 (EU-1): Rotary Cement Kiln ESP Main Stack

This emission unit consists of a 500 foot long, 1354 ton/day capacity, rotary Portland cement kiln fired with various fuels through several burners and controlled by a 400,000 cfm (700F) 100 KVA Electro-Static Precipitator. The main stack emissions are monitored for opacity and sulfur dioxide emissions by a continuous emission monitoring system. Solid, liquid, and gaseous fuels include bituminous coal, petroleum coke, tire-derived fuel, hog fuel, fuel oil, waste oil, residual oil (including tank bottom oil), and natural gas. Dust entrained in the flue gases is collected in an electrostatic precipitator (ESP). The dust collected may be discarded, sold as a byproduct, or fed back into the kiln process. Emissions exit from the ESP through a main stack. A continuous emission monitoring system on the main stack measures opacity and SO₂ emissions.

Table 2 Emission Unit # (EU-1)

APPLICABLE REQUIREMENTS

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
General Operations – State & Local						
EU 1.1	Puget Sound Clean Air Agency Reg I: 9.20(a)	6/09/1988	Must maintain sources approved under Puget Sound Clean Air Agency Reg. I, Article 6 in good working order	II.A(1) Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements (Facility-wide) II.B. Operation and Maintenance (O&M) Plan Requirements	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.2	RCW 70.94.152(7) (State Only)	1996	Must maintain equipment in good working order.	II.A(1) Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements (Facility-wide) II.B. Operation and Maintenance (O&M) Plan Requirements	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
Visible Emissions						
EU 1.3	<p>WAC 173-400-040(1) <i>This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-040(1) into the SIP</i></p> <p>WAC 173-400-040(1) (State Only). <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-040(1)</i></p>	<p>09/20/93</p> <p>9/15/01</p>	<p>Shall not emit visible emissions more than 20% opacity for more than 3 minutes in any 1-hour period</p>	<p>II.A(1) Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements (Facility-wide)</p> <p>II.B. Operation and Maintenance (O&M) Plan Requirements</p>	<p>More than 3 min. in any 1 hr</p>	<p>Ecology Method 9A 7/12/1990 (See Section X)</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.4	Puget Sound Clean Air Agency Reg. I: 9.09(b)(1) <i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.04(c)(2) upon its adoption into the SIP.</i>	02/10/94	CEMS 20% Opacity Shall be unlawful for any person to cause or allow the emissions of any air contaminant (as determined by a continuous emission monitoring system) that is greater than 20% opacity for a period aggregating more than 3 minutes in any 1 hour.	II.A.2(a) Opacity CEMS II.A.2(d) Alternate Opacity Monitoring II.B. Operation and Maintenance (O&M) Plan Requirement	More than 3 min. in any 1 hr	EPA Performance Specification 1 (40 CFR 60, Appendix B July 1, 1997)
EU 1.5	Puget Sound Clean Air Agency Reg. I: 9.04(c)(2) (State Only) <i>This requirement will become federally enforceable upon adoption into the SIP.</i> <i>When the 4/9/98 version of 9.04(c)(2) is adopted into the SIP this standard of 20% opacity for 6 minutes in any one hour will allow both a CEM and visual EPA Method 9</i>	04/09/98	CEMS or Visual 20% Opacity It shall be unlawful for any person to cause or allow the emission of any air contaminant during any hour that contains any consecutive 6-minute period averaging greater than 20% opacity.	II.A.2(a) Opacity CEMS II.A.2(d) Alternate Opacity Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	6-minute period	EPA Method 9 (40 CFR 60, Appendix A, July 1, 2001) EPA Performance Specification 1 (40 CFR 60, Appendix B, July 1, 1997)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
Particulate Standards						
EU 1.6	Puget Sound Clean Air Agency Reg. I: 9.09(a) <i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.09 upon its adoption into the SIP</i> Puget Sound Clean Air Agency Reg. I: 9.09 (State Only) <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 2/10/94 version</i>	02/10/94 04/09/98	Shall not emit particulate matter in excess of 0.05 gr/dscf (uncorrected for excess air).	II.A.2(a) Opacity CEMS II.A.2(d) Alternate Opacity Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	At least 1-hr per run	Puget Sound Clean Air Agency Method 5 (See Section X)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.7	<p>WAC 173-400-060 <i>This requirement shall be superseded by the 9/15/01 version of WAC 173-400-060 upon its adoption into the SIP</i></p> <p>WAC 173-400-060 <i>(State Only) This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-060</i></p>	<p>09/20/93</p> <p>9/15/01</p>	Shall not cause or permit the emission of particulate material in excess of 0.1 gr/dscf of exhaust gas (uncorrected for excess air).	<p>II.A.2(a) Opacity CEMS</p> <p>II.A.2(d) Alternate Opacity Monitoring</p> <p>II.B. Operation and Maintenance (O&M) Plan Requirements</p>	At least 1-hr per run	EPA Method 5 (40 CFR Part 60, Appendix A, July 1, 2001)
SO₂ Standards						
EU 1.8	<p>Puget Sound Clean Air Agency Reg I: 9.07</p> <p>WAC 173-400-040(6) first paragraph only</p>	<p>4/14/1994</p> <p>8/20/1993</p>	Shall not emit SO ₂ in excess of 1,000 ppmv (dry)	<p>II.A.2(b) SO₂ CEMS</p> <p>II.B. Operation and Maintenance (O&M) Plan Requirements</p>	1-hour average	<p>EPA Method 6C (40 CFR 60, Appendix A, July 1, 2001)</p> <p>(40 CFR 60, Appendix B, & Appendix F, 7/1/1997)</p>

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
HCl Standards						
EU 1.9	Puget Sound Clean Air Agency Reg I: 9.10(a) (<i>STATE ONLY</i>)	6/09/88	Shall not emit HCl in excess of 100 ppm (dry)	NA	1-hour average	40 CFR 60, Appendix A, Reference Methods 26 or 26A, 7/1/2001
Puget Sound Clean Air Agency Orders of Approval - Tire Fuel Limits						
EU 1.10	Puget Sound Clean Air Agency Order of Approval No. 3374 Condition 5	7/10/91	Shall limit tire derived fuel (lb/hr) used in the kiln to less than 20% by weight of coal & coke (lb/hr) used.	II.A.2(c) Tire Derived Fuel Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	Measuring Frequency Hourly by BTU of all fuels	Compliance Method for fuel Btu
Puget Sound Clean Air Agency Orders of Approval – Alternate Opacity						
EU 1.11	Puget Sound Clean Air Agency Order of Approval No. 5183 Condition 4	2/9/94	Shall be unlawful to cause or allow the kiln stack emissions to exceed 12% opacity for a 1-hour average. A violation of this opacity standard shall be a violation of the particulate standard of 0.05 gr/dscf in Regulation I, Section 9.09.	II.A.2(d) Alternate Opacity Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	1-hour average	Continuous Opacity Monitor 40 CFR 60, Appendix A, Reference Method 5 as modified by Puget Sound Clean Air Agency Resolution dated 8/11/1983

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Puget Sound Clean Air Agency Orders of Approval – Alternate Fuels						
EU 1.12	Puget Sound Clean Air Agency Order of Approval No. 6202 Condition 4	11/15/95	Shall use oils that are not dangerous waste meeting WAC 173-303-090 Dangerous Waste Characteristics, and WAC 173-303-515 Standards for the Management of Used Oil.	II.A.2(i) Waste Derived Fuel Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	Daily average	NA
EU 1.13	Puget Sound Clean Air Agency Order of Approval No. 6202 Condition 5 Cement Kiln Burner and fuels permitted	11/15/95	Shall limit replacement fuels to < 25% of the heat input to the kiln on daily average.	II.A.2(i) Waste Derived Fuel Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	Daily average	NA
EU 1.14	Puget Sound Clean Air Agency Order of Approval No. 6202 Condition 6	11/15/95	Shall limit replacement fuels to none hazardous oil including the following: (a) Used Oil; (b) Refined Oil Tank Bottoms; (c) Raw Crude Tank Bottoms; (d) Heavy Vacuum Gas Oil Waste; (e) Off Specification Fuel Oil.	II.A.2(i) Waste Derived Fuel Monitoring II.B. Operation and Maintenance (O&M) Plan Requirements	Daily average	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.15	Puget Sound Clean Air Agency Order of Approval No. 6202 Condition 7 Cement Kiln Burner and fuels permitted	11/15/95	Shall not burn waste derived fuels with: Ash greater than 50% by weight, Sulfur greater than 2.5% by weight, Lead greater than 1000 ppm by weight, Total Halogens greater than 5000 ppm by weight, PCB greater than 50 ppm by weight, Flash Point less than 100 degrees F, Heat Content either less than 5,000 or greater than 19,000 Btu/lb.	II.A.2(i) Waste Derived Fuel Monitoring II.A.2(m) Operation and Maintenance (O&M) Plan Requirements		Ash, ASTM D 482 Sulfur, ASTM D 3120 Lead, EPA 600/4-81-045, Method 200.7 Total Halogens, EPA SW-846 Method 9076 PCB, EPA SW-846 Method 8080 FlashPoint, EPA SW 846 Method 1020 Heat Content, Bomb Calorimeter
<p><i>NESHAP General Provisions</i></p> <p>Requirement Nos. EU 1.16 through EU 1.60 are the NESHAP General Provisions, 40 CFR 63 Subpart A, that apply to sources subject to the Portland Cement NESHAP. Applicability of 40 CFR 63 Subpart A is defined in Table 1 to Subpart LLL of Part 63. Table 1 supersedes this permit if an apparent conflict exists. These General Provisions are included in this table because the kiln is the only affected source at Lafarge under this NESHAP. The specific provisions identified reflect the applicable provisions of Subpart LLL that relate to this affected unit.</p>						
EU 1.16	40 CFR 63.1 Puget Sound Clean Air Agency Reg III: 2.02	4/5/02 09/09/99	40 CFR 63 Subpart A applies to Lafarge	None required	N/A	N/A
EU 1.17	40 CFR 63.6	4/5/02	Lafarge shall comply with standards and maintenance requirements of 40 CFR 63, Part A as relate to Subpart LLL.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.18	40 CFR 63.6(e)	4/5/02	Lafarge shall develop and follow both an O&M Plan and a startup, shutdown, and malfunction (SSM) plan.	None required	N/A	N/A
EU 1.19	40 CFR 63.6(e)(1) Puget Sound Clean Air Agency Reg III: 2.02	4/5/02 09/09/99	Lafarge shall operate and maintain equipment consistent with good air pollution control practice at all times, including startup, shutdown, and malfunction. Lafarge shall correct malfunctions as soon as practicable after their occurrence. NOTE: Additional O&M provisions in 40 CFR Subpart LLL.	None required	N/A	N/A
EU 1.20	40 CFR 63.6(e)(3)(i)	4/5/02	Lafarge shall develop and implement a written startup, shutdown, and malfunction (SSM) plan to include the specified details.	None required	N/A	N/A
EU 1.21	40 CFR 63.6(e)(3)(ii)	4/5/02	Lafarge shall operate the affected source in accordance with SSM plan.	None required	N/A	N/A
EU 1.22	40 CFR 63.6(e)(3)(iii)	4/5/02	Lafarge shall keep records which demonstrate procedures in the SSM plan were followed during startup, shutdown, and malfunctions.	None required	N/A	N/A
EU 1.23	40 CFR 63.6(e)(3)(iv)	4/5/02	If actions by Lafarge are not consistent with the SSM plan, Lafarge shall report such actions within 2 working days of commencing the action, followed by a letter within 7 working days after the end of the event.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.24	40 CFR 63.6(e)(3)(v)	4/5/02	Lafarge shall keep the SSM plan on record and available for inspection, upon request. Previous versions shall also be on record and available for 5 years after each revision.	None required	N/A	N/A
EU 1.25	40 CFR 63.6(e)(3)	4/5/02	Lafarge shall change the SSM plan if required by the Puget Sound Clean Air Agency if it is determined to be unacceptable under 40 CFR 63.6(e)(2).	None required	N/A	N/A
EU 1.26	40 CFR 63.6(e)(3)(viii)	4/5/02	Lafarge shall update the SSM plan within 45 days of an SSM event which the existing plan failed to address or inadequately addressed.	II.a.2(i) NESHAPS General Monitoring		
EU 1.27	40 CFR 63.6(e)(3)(ix)	4/5/02	Lafarge shall have an SSM plan which conforms to the provisions of Part 63 and shall operate and maintain the source in accordance with the procedures in the current plan.	II.a.2(i) NESHAPS General Monitoring	N/A	N/A
EU 1.28	40 CFR 63.6(f)	4/5/02	Lafarge shall comply with the non-opacity emissions standards at all times except during startup, shutdown, and during malfunction. NOTE: Compliance with standards is based on source tests, conformance with O&M Plan, and inspections.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.29	40 CFR 63.7	4/5/02	Performance testing requirements.	II.A.2 (j) Subpart LLL Monitoring & Compliance Provisions	Three runs, each at least one hour	40 CFR 51, Appendix M, Reference Method 204. 40 CFR 60, Appendix A, Reference Methods 2, 2A, 2C, 2D, 2F, or 2G; 18 or 25A, or ASTM D6420-99 in lieu of Method 25A.
EU 1.30	40 CFR 63.7(a)(1)	4/5/02	Lafarge shall meet the performance testing dates and requirements unless specified in 40 CFR 63.7 or 40 CFR 63.1349.	None required	N/A	N/A
EU 1.31	40 CFR 63.7(a)(2)	4/5/02	Lafarge shall follow the criteria of 40 CFR 63.7(a)(2) for testing within 180 days of June 10, 2002.	None required	N/A	N/A
EU 1.32	40 CFR 63.7(a)(3)	4/5/02	Puget Sound Clean Air Agency has the authority to require Lafarge to source tests at such times authorized by section 114 of the Act.	None required	N/A	N/A
EU 1.33	40 CFR 63.7(b)(1)	4/5/02	(b) Notification of performance test. (1) Lafarge shall notify Puget Sound Clean Air Agency within 60 days before scheduled tests to allow Puget Sound Clean Air Agency to approve plan. Puget Sound Clean Air Agency's observations are optional.	II.A.2(k) NESHAPS Notification, Reporting and Recordkeeping	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.34	40 CFR 63.7(b)(2)	4/5/02	<p>If a test must be delayed, Lafarge shall notify Puget Sound Clean Air Agency within 5 days of test date.</p> <p>During a test delay Lafarge shall continue to meet all applicable requirements.</p>	None required	N/A	N/A
EU 1.35	40 CFR 63.7(c)(1)	4/5/02	QA data will be considered by Puget Sound Clean Air Agency in determining the validity of performance tests.	None required	N/A	N/A
EU 1.36	40 CFR 63.7(c)(2)(i)	4/5/02	<p>Lafarge's source test plan shall follow Regulation I, Section 3.07.</p> <p>Data quality objectives include expected precision, accuracy, data completeness and internal and external QA.</p>	None required	N/A	N/A
EU 1.37	40 CFR 63.7(c)(2)(ii)	4/5/02	(ii) The internal QA program shall include, routine operators and analysis of data precision (i.e., analysis of replicate samples).	None required	N/A	N/A
EU 1.38	40 CFR 63.7(c)(2)(iii)	4/5/02	(iii) The external QA program shall include, EPA audit samples. Puget Sound Clean Air Agency activities may include checks of field maintenance, and data calibration, validation and quality control.	None required	N/A	N/A
EU 1.39	40 CFR 63.7(c)(2)(iv)	4/5/02	(iv) Lafarge shall submit a source test plan to Puget Sound Clean Air Agency at least 60 calendar days before scheduled date.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.40	40 CFR 63.7(c)(2)(v)	4/5/02	(v) Puget Sound Clean Air Agency may request additional information supporting the source test plan.	None required	N/A	N/A
EU 1.41	40 CFR 63.7(c)(3)(i)	4/5/02	(i) Puget Sound Clean Air Agency approves or deny Lafarge's source test plan within 30 calendar days of receiving either original or requested information. Puget Sound Clean Air Agency notifies denial and provides 30 calendar days for additional information.	None required	N/A	N/A
EU 1.42	40 CFR 63.7(c)(3)(ii)	4/5/02	(ii) If Puget Sound Clean Air Agency does not approval or deny source test plan: (A) Lafarge shall follow EPA Methods within specified time periods, or (B) Lafarge shall wait for administrator approval of alternate methods.	None required	N/A	N/A
EU 1.43	40 CFR 63.7(c)(3)(iii)	4/5/02	(iii) Source shall remain in compliance with or without an approved source test plan.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.44	40 CFR 63.7(c)(4)	4/5/02	<p>(4)(i) Lafarge shall analyze samples during each compliance test. Lafarge shall request audit samples 45 days prior to test dates. Obtain cylinder audit gases, EPA.</p> <p>(ii) Puget Sound Clean Air Agency will have sole discretion to require Lafarge to conduct any subsequent remedial actions of based on audit results.</p> <p>(iii) If Puget Sound Clean Air Agency does not provide audit samples to Lafarge in time for analysis, analysis is not required.</p> <p>However, this waiver does not affect future audit sample analyzes.</p>	None required	N/A	N/A
EU 1.45	40 CFR 63.7(d)	4/5/02	(d) Lafarge shall provide testing facilities as required in 40 CFR 63.7(d)(1)-(5).	None required	N/A	N/A
EU 1.46	40 CFR 63.7(e)	4/5/02	(e) Performance tests shall be conducted following 40 CFR 63.7(e)(1)-(4).	None required	N/A	N/A
EU 1.47	40 CFR 63.8(b)	4/5/02	Monitoring shall be conducted as set forth in this section and the relevant standard (40 CFR 63.1350(f)).	II.A.2 (j) Subpart LLL Monitoring & Compliance Provisions	N/A	N/A
EU 1.48	40 CFR 63.9(a)(4)(ii)	2/12/99	After the State (or local agency) has been delegated authority to implement and enforce notification requirements under this subpart, Lafarge shall submit notifications under this subpart to that delegated authority with an additional copy to the EPA Regional office.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.49	40 CFR 63.9(b)(3)-(b)(5)	4/5/02	Lafarge shall notify Puget Sound Clean Air Agency, of construction or reconstruction of new affected source.	None required	N/A	N/A
EU 1.50	40 CFR 63.9(g)(1)	4/5/02	Lafarge shall notify Puget Sound Clean Air Agency of the date the CMS performance evaluation is scheduled to begin.	None required	N/A	N/A
EU 1.51	40 CFR 63.9(i)	4/5/02	Lafarge may request Puget Sound Clean Air Agency approval to adjust postmark or time period deadlines.	None required	N/A	N/A
EU 1.52	40 CFR 63.9(j)	4/5/02	Any change in the information already provided per 40 CFR 63.9 shall be sent to the Puget Sound Clean Air Agency within 15 days.	None required	N/A	N/A
EU 1.53	40 CFR 63.10	4/5/02	Reporting and recordkeeping requirements	None required	N/A	N/A
EU 1.54	40 CFR 63.10(a)(3)-(7)	4/5/02	Lafarge shall send reports to EPA and the Puget Sound Clean Air Agency per 40 CFR 63.10(a)(3)-(7) and may request changing report due dates.	None required	N/A	N/A
EU 1.55	40 CFR 63.10(b)(1)	4/5/02	Lafarge shall retain files of all information required by this part for at least 5 years following the date of each action and record. At a minimum, records will be retained on site at least two years, while the remaining three years may be retained offsite.	None required	N/A	N/A

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.56	40 CFR 63.10(b)(2)	4/5/02	Lafarge shall maintain records per 40 CFR 63.10(b) (e.g., occurrence and duration of startups, malfunctions, exceedances, maintenance, corrective actions and all NESHAP required information.	None required	N/A	N/A
EU 1.57	40 CFR 63.10(b)(3)	4/5/02	Lafarge shall keep applicability determinations of Subpart LLL, HAP potentials (without considering controls) with specified conditions, on site for 5 years.	None required	N/A	N/A
EU 1.58	40 CFR 63.10(d)(1)	4/5/02	Lafarge shall submit reports in accordance with 40 CFR 63 Subpart LLL.	None required	N/A	N/A
EU 1.59	40 CFR 63.10(f)	4/5/02	Lafarge shall comply with recording and reporting requirements of 40 CFR 63.10, unless a waiver is granted by the Administrator.	None required	N/A	N/A
<i>NESHAP Specific Applicable Provisions</i>						
Requirement Nos. EU 1.61 through 1. 66 are the specifically applicable requirements identified in Subpart LLL.						
EU 1.60	40 CFR 63.1343(d)(2)	6/14/99	Dioxin/furan (D/F) shall not exceed 0.40 ng/dscm (1.7×10^{-10} gr/dscf)(TEQ) @ 7% O ₂ when average ESP inlet temperatures is $\leq 400^{\circ}\text{F}$ during D/F test.	II.A.2(j) Subpart LLL Monitoring & Compliance Provisions II.A.2(k) NESHAPS Notification, Reporting & Recordkeeping	(3) 3-hour runs	EPA Method 23 (40 CFR 60, Appendix A, July 1, 2001)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.61	40 CFR 63.1344(a)	6/14/99	Lafarge shall operate the kiln such that the temperature of the gas inlet to the kiln particulate matter control device (PMCD) does not exceed the applicable temperature limit established during the performance test (40 CFR 63.1349(b)).	II.A.2(j) Subpart LLL Monitoring & Compliance Provisions II.A.2(k) NESHAPS Notification, Reporting & Recordkeeping	3-Hour Rolling Average	NIST Calibrated Reference Thermocouple – Potentiometer system
EU 1.62	40 CFR 63.1344(b)	6/14/99	The temperature limit for affected sources meeting the limits in 40 CFR 63.1344(a) is determined in accordance with 40 CFR 63.1349(b)(3)(iv)	II.A.2(j) Subpart LLL Monitoring & Compliance Provisions II.A.2(k) NESHAPS Notification, Reporting & Recordkeeping	3-hour rolling average	NIST Calibrated Reference Thermocouple-Potentiometer
EU 1.63	40 CFR 63.1349(a)	6/14/99	Lafarge shall demonstrate initial compliance through a performance test following requirements in 40 CFR 63.1350(b) and 40 CFR 63.7. Performance test results will be documented in complete test reports to include information identified in paragraphs (a)(1) through (a)(10)	II.A.2(j) Subpart LLL Monitoring & Compliance Provisions II.A.2(k) NESHAPS Notification, Reporting & Recordkeeping	NA	NA

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU 1.64	40 CFR 63.1350(b)(3)	6/14/99	Performance testing requirements for D/F limits to include development of temperature limit at inlet to PMCD.	II.A.2(j) Subpart LLL Monitoring & Compliance Provisions II.A.2(k) NESHAPS Notification, Reporting & Recordkeeping	NA	NA
EU 1.65	40 CFR 63.1350(a)	6/14/99	Lafarge shall prepare a written operations and maintenance plan for each affected unit and submit it to the Administrator for review and approval.	II.A.2(j) Subpart LLL Monitoring & Compliance Provisions II.A.2(k) NESHAPS Notification, Reporting & Recordkeeping	NA	NA
<p>WAC 173-434 Solid Waste Incineration Facilities</p> <p>These requirements apply as a result of waste fuels burned (see Conditions EU 1.10 and EU 1.12-1.15) and the SIP approved version of WAC 173-434 (10/18/90). WAC 173-434 was updated (effective 1/22/04) and will exempt certain waste fuels from the applicability of this regulation. Once the 1/22/04 version of WAC 173-434 is incorporated into the SIP, Conditions EU 1.66 of this permit (along with the terms of the compliance schedule for this condition) will be superceded and inapplicable for this permit, based on the presently approved operations at Lafarge.</p>						
EU 1.66	WAC 173-434	10/18/90	Emission limits and operational parameter limits for solid waste incineration facilities.	V.L.2 Error! Reference source not found.	N/A	N/A

N/A = Not Applicable. A specific reference test method and/or emission standard period is specified in the requirement. A test method is neither needed nor appropriate.

2. Emission Unit #2 (EU-2): Clinker Cooler

Hot clinker from the kiln feeds into the clinker cooler and cooled by counter current air being drawn back through the kiln to recapture heat. Excess heat, heat not returned to the kiln and excess heat from kiln pushes become discharged through cooler fans into the clinker cooler baghouses. These dust collectors consist of east and west sides with upper and lower baghouses. The two lower dust collectors are the main clinker cooler baghouses each with 62500 cfm at 220 to 240°F. The two upper dust collectors are the backup baghouses each with 31250 cfm at 220°F each.

The total exhaust (125,000 cfm) from the two main baghouses is manifolded through a single exit on the side of the clinker cooler building. The total exhaust (62,500 cfm) from the two backup baghouses is manifolded through a single stack on top of the clinker cooler building. The lower and upper baghouses are not operated at the same time.

A continuous emission monitor for opacity is installed on the single exhaust stack for the main baghouses exhausting out the side of the clinker cooler building. No opacity monitor is installed on the upper baghouses which exhaust from two vertical stacks on top of the clinker building.

There are also two additional stacks on the top of the clinker cooler building called the 'dump' stacks. The 'dump' stacks are used in emergencies to discharge hot kiln gases directly to the atmosphere and bypass all four baghouses. An emergency bypass of the dust collectors becomes necessary if hot kiln gases can not be cooled quick enough by either dilution or water sprays and must be discharged immediately to avoid destroying the baghouses.

Table 3 Emission Unit # (EU-2):

APPLICABLE REQUIREMENTS

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
State & Local - Operations						
EU-2.1	Puget Sound Clean Air Agency Reg I: 9.20(a)	6/09/1988	Must maintain sources approved under Puget Sound Clean Air Agency Reg. I, Article 6 in good working order	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	N/A
EU-2.2	RCW 70.94.152(7) (STATE ONLY)	1996	Must maintain equipment in good working order.	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	N/A
Visible Emissions						

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-2.3	<p>WAC 173-400-040(1) <i>This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-040(1) into the SIP</i></p> <p>WAC 173-400-040(1) (State Only). <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-040(1)</i></p>	<p>09/20/93</p> <p>9/15/01</p>	<p>Shall not emit more than 20% opacity for more than 3 minutes in any 1-hour period</p>	<p>II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements</p>	<p>More than 3 min. in any 1 hr</p>	<p>Ecology Method 9A 7/12/1990 (See Section X)</p>
EU-2.4	<p>Puget Sound Clean Air Agency Reg. I: 9.09(b)(1)</p> <p><i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.04(c)(2) upon its adoption into the SIP.</i></p>	<p>02/10/94</p>	<p>CEMS 20% Opacity</p> <p>Shall be unlawful for any person to cause or allow the emissions of any air contaminant (as determined by a continuous emission monitoring system) that is greater than 20% opacity for a period aggregating more than 3 minutes in any 1 hour.</p>	<p>II.A.2(a) Opacity CEMS</p> <p>II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements</p>	<p>More than 3 min. in any 1 hr</p>	<p>EPA Performance Specification 1 (40 CFR 60, Appendix B July 1, 1997)</p>

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-2.5	<p>Puget Sound Clean Air Agency Reg. I: 9.04(c)(2) (State Only)</p> <p><i>This requirement will become federally enforceable upon adoption into the SIP and will replace Puget Sound clean Air Agency Reg I: 9.09(b)(1) effective 2/10/94</i></p>	04/09/98	<p>CEMS or Visual 20% Opacity</p> <p>It shall be unlawful for any person to cause or allow the emission of any air contaminant during any hour that contains any consecutive 6-minute period averaging greater than 20% opacity.</p>	<p>II.A.2(a) Opacity CEMS</p> <p>II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements</p>	6-minute period	<p>EPA Method 9 (40 CFR 60, Appendix A, July 1, 2001)</p> <p>EPA Performance Specification 1 (40 CFR 60, Appendix B, July 1, 1997)</p>
EU-2.6	<p>Puget Sound Clean Air Agency Reg. I: 9.09(b)(2)</p> <p><i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.04(c)(2) upon its adoption into the SIP.</i></p>	02/10/94	<p>CEMS 5% Opacity</p> <p>Shall be unlawful for any person to cause or allow the emissions of any air contaminant (<u>as determined by a continuous emission monitoring system</u>) that is greater than 5% opacity for a 1-hour average.</p>	<p>II.A.2(a) Opacity CEMS</p> <p>II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements</p>		

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-2.7	<p>Puget Sound Clean Air Agency Reg. I: 9.04(c)(1) (State Only)</p> <p><i>This requirement will become federally enforceable upon adoption into the SIP.</i></p> <p><i>When the 4/9/98 version of 9.04(c)(2) is adopted into the SIP this standard of 20% opacity for 6 minutes in any one hour will allow both a CEM and visual EPA Method 9</i></p>	04/09/98	<p>CEMS or Visual 5% Opacity</p> <p>It shall be unlawful for any person to cause or allow the emission of any air contaminant during any hour that averages greater than 5% opacity.</p>	<p>II.A.2(a) Opacity CEMS</p> <p>II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements</p>	1-hour average	EPA Performance Specification 1 (40 CFR 60, Appendix B July 1, 1997)
Particulate Standards						

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-2.9	<p>WAC 173-400-060</p> <p><i>This requirement shall be superseded by the 9/15/01 version of WAC 173-400-060 upon its adoption into the SIP</i></p> <p>WAC 173-400-060 (State Only) This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-060</p>	<p>3/22/91</p> <p>9/15/01</p>	<p>Shall not emit particulate material in excess of 0.1 gr/dscf (uncorrected for excess air).</p>	<p>II.A.2(a) Opacity CEMS</p> <p>II.B. Operation and Maintenance (O&M) Plan Requirements</p>	<p>At least 1-hr per run</p>	<p>EPA Method 5 (40 CFR Part 60, Appendix A, July 1, 2001)</p>
PUGET SOUND CLEAN AIR AGENCY Orders of Approval – PM10 Limits						
EU-2.10	<p>Puget Sound Clean Air Agency Order of Approval No. 5627 Condition No. 5</p> <p>Limit PM10 Emissions</p>	12/27/94	<p>Particulate matter (PM10) emissions from the lower clinker cooler BH shall not exceed 0.025 gr/dscf.</p>	<p>II.A.2(a) Opacity CEMS</p> <p>II.B. Operation and Maintenance (O&M) Plan Requirements</p>	<p>At least 1-hr per run</p>	<p>EPA Method 201A/202 (40 CFR 51 Appendix M, July 1, 2001)</p>

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-2.11	Puget Sound Clean Air Agency Order of Approval No. 5627, Condition No. 4	12/27/94	The lower clinker cooler baghouse and the upper clinker cooler baghouse shall not be operated at the same time during normal operating conditions.	II.A.2(e) PM10 Clinker Cooler Monitoring	NA	NA

NA = Not Applicable

3. Emission Unit #3 (EU-3): [RESERVED]

4. Emission Unit #4 (EU-4):

Raw Material, Clinker and Finished Product Storage Bins; Finish Mill Conveying System Transfer Points, Bagging System and Bulk Loading/Unloading System. This unit also includes the general fuel system.

Table 5 Emission Unit # (EU-4):

APPLICABLE REQUIREMENTS

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
State & Local Operations						
EU-4.1	Puget Sound Clean Air Agency Reg I: 9.20(a)	6/09/1988	Must maintain sources approved under Puget Sound Clean Air Agency Reg. I, Article 6 in good working order	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	N/A
EU-4.2	RCW 70.94.152(7) (STATE ONLY)	1996	Must maintain and operate equipment requiring an NOC in good working order	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	N/A
Visible Emissions						

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-4.3	Puget Sound Clean Air Agency Reg. I: 9.03 <i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.04 upon its adoption into the SIP</i>	9/08/94	Shall not emit more than 20% opacity for a period or periods aggregating more than 3 minutes in any 1-hour period	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	More than 3 min. in any 1 hr	Ecology Method 9A 7/12/1990 (See Section X)
EU-4.4	WAC 173-400-040(1) <i>This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-040(1) into the SIP</i> WAC 173-400-040(1) (State Only). <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-040(1)</i>	09/20/93 9/15/01	Shall not emit more than 20% opacity for more than 3 minutes in any 1-hour period	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	More than 3 min. in any 1 hr	Ecology Method 9A 7/12/1990 (See Section X)

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
Particulate Standards						
EU-4.5	Puget Sound Clean Air Agency Reg. I: 9.09(a) <i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.09 upon its adoption into the SIP</i> Puget Sound Clean Air Agency Reg. I: 9.09 (State Only) <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 2/10/94 version</i>	02/10/94 04/09/98	Particulate Emission Shall not emit particulate matter in excess of 0.05 gr/dscf (uncorrected for excess air)	II.B. Operation and Maintenance (O&M) Plan Requirements	At least 1-hr per run	Puget Sound Clean Air Agency Method 5 (See Section X)

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-4.7	Puget Sound Clean Air Agency Order of Approval No. 5627 Condition No. 6 Limit PM10 Emissions.	12/27/94	<p>PM10 from each baghouse shall not exceed 0.005 gr/dscf 24 hr average & compliance may be demonstrated by one of the following methods:</p> <ul style="list-style-type: none"> a. Puget Sound Clean Air Agency approved source test; b. No visible emissions for 15 consecutive seconds; c. No visible emissions for 3 consecutive minutes; or d. Repairing baghouse with visible emissions for more than 3 minutes within 24 hours. <p>Puget Sound Clean Air Agency may require source tests of BHs with sustained visible emissions unless emissions are considered unavoidable under WAC 173-400-107.</p>	<p>II.B. Operation and Maintenance (O&M) Plan Requirements</p> <p>II.A.2(f) PM10 Monitoring</p>	Source test for a 24 hr period	Particulate by EPA Method 5 or EPA Method 201A; visible emissions by EPA Method 22.

NA = Not Applicable

5. Emission Unit #5 (EU-5): Cement Kiln Dust Recycle System

This emission unit consists of the following: The Cement Kiln Dust Recycle System consisted of a conveyors for ESP captured dust, a kiln dust storage silo and a MikroPul 100 S-8 BH at 8000 cfm for recycling ESP dust back to kiln.

Table 6 Emission Unit # (EU-):

APPLICABLE REQUIREMENTS

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
State & Local Operations						
EU-5.1	Puget Sound Clean Air Agency Reg I: 9.20(a)	6/09/1988	Must maintain sources approved under Puget Sound Clean Air Agency Reg. I, Article 6 in good working order	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	N/A
EU-5.2	RCW 70.94.152(7) <i>(STATE ONLY)</i>	1996	Must maintain and operate equipment requiring an NOC in good working order	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	N/A
Visible Emissions						

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-5.3	<p>Puget Sound Clean Air Agency Reg. I: 9.03</p> <p><i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.04 upon its adoption into the SIP</i></p>	9/08/94	<p>Visible Opacity</p> <p>Shall not emit more than 20% opacity for a period or periods aggregating more than 3 minutes in any 1-hour period</p>	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	More than 3 min. in any 1 hr	Ecology Method 9A 7/12/1990 (See Section X)
EU-5.4	<p>WAC 173-400-040(1) <i>This requirement will be superseded upon adoption of the 9/15/01 version of WAC 173-400-040(1) into the SIP</i></p> <p>WAC 173-400-040(1) (State Only). <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 9/20/1993 version of WAC 173-400-040(1)</i></p>	<p>09/20/93</p> <p>9/15/01</p>	<p>Visible Opacity</p> <p>Shall not emit more than 20% opacity for more than 3 minutes in any 1-hour period</p>	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	More than 3 min. in any 1 hr	Ecology Method 9A 7/12/1990 (See Section X)

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
Particulate Standards						
EU-5.5	Puget Sound Clean Air Agency Reg. I: 9.09(a) <i>This requirement shall be superseded by the 4/9/98 version of Reg. I: 9.09 upon its adoption into the SIP</i> Puget Sound Clean Air Agency Reg. I: 9.09 (State Only) <i>This requirement will become federally enforceable upon adoption into the SIP and will replace the 2/10/94 version</i>	02/10/94 04/09/98	Particulate Emission Shall not emit particulate matter in excess of 0.05 gr/dscf (uncorrected for excess air)	II.B Operation and Maintenance (O&M) Plan Requirements	At least 1-hr per run	Puget Sound Clean Air Agency Method 5 (See Section X)

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
PUGET SOUND CLEAN AIR AGENCY Orders of Approval – PM10 Cap						
EU-5.7	Puget Sound Clean Air Agency Order of Approval No. 5627 Condition No. 6 Limit PM10 Emissions.	12/27/94	<p>PM10 from each baghouse shall not exceed 0.005 gr/dscf 24 hr average & compliance may be demonstrated by one of the following methods:</p> <p>a. Puget Sound Clean Air Agency approved source test;</p> <p>b. No visible emissions for 15 consecutive seconds;</p> <p>c. No visible emissions for 3 consecutive minutes; or</p> <p>d. Repairing baghouse with visible emissions for more than 3 minutes within 24 hours.</p> <p>Puget Sound Clean Air Agency may require source tests of BHs with sustained visible emissions unless emissions are considered unavoidable under WAC 173-400-107.</p>	<p>II.B. Operation and Maintenance (O&M) Plan Requirements</p> <p>II.A.2(f) PM10 Monitoring</p>	Source test for a 24 hr period	Particulate by EPA Method 5 or EPA Method 201A; visible emissions by EPA Method 22.

Reqmt No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II)	Emission Standard Period	Reference Test Method
EU-5.8	Puget Sound Clean Air Agency Order of Approval No. 8022 Condition No. 3 Limit PM10 Emissions. 40 CFR 60.62 (c)	2/23/00 10/6/75	Condition #3: Shall comply with 40 CFR 60, Subpart A and Subpart F. Shall not cause to be discharged into gases that exhibit 10 percent opacity or greater. 40 CFR 63.1356 Exemption from NSPS.	II.B. Operation and Maintenance (O&M) Plan Requirements	6-minute period	EPA Method 9 (40 CFR 60, Appendix A, July 1, 2001)
EU-5.9	Puget Sound Clean Air Agency Order of Approval No. 8022 Condition No. 4 Limit PM10 Emissions.	2/23/00	Shall not exceed 0.005 gr/dscf from the CKD recycle BH.	II.B. Operation and Maintenance (O&M) Plan Requirements II.A.2 (g) Cement Kiln Dust Recycle System Visible Emission Monitoring		Puget Sound Clean Air Agency Method 5 (See Section X)

NA = Not Applicable

II. MONITORING, MAINTENANCE AND RECORDKEEPING METHODS DESCRIPTION

A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements

1. Facility-wide Monitoring, Maintenance & Recordkeeping Requirements

(a) General Visual Opacity Monitoring

Lafarge shall conduct monthly inspections of the facility for visible emissions. Inspections are to be performed while the equipment is in operation during daylight hours. If, during the scheduled inspection or at any other time, visible emissions other than uncombined water are observed, Lafarge shall, as soon as possible, but no later than 24 hours of the initial observation, take corrective action until there are no visible emissions or, alternatively, record the opacity using the reference test method or shut down the unit or activity until it can be repaired.

[WAC 173-401-615(1), 10/17/02]

(b) Complaint Response

Lafarge shall develop and implement an Air Pollution Complaint Response Program as part of the O&M Plan required by Regulation I Section 7.09(b). The Complaint Response Program shall be annually reviewed and updated along with the O&M plan. This Program shall include the elements described below.

- (i) The Lafarge air pollution complaint response program shall include:
 - 1) A Lafarge local contact person and a 24-hour telephone number;
 - 2) Complaint forms available to the public;
 - 3) Description of public communication procedures in response to complaints;
 - 4) Criteria and methods for establishing whether Lafarge may be the source of complaints;
 - 5) Actions for addressing complaints and their causes; and
 - 6) Format of communicating results of investigations and advising complainants of Lafarge's corrective actions and preventive maintenance.
- (ii) Lafarge shall record air pollution complaints and findings of investigations. Investigations shall be conducted within 3 days. Investigations shall include potential sources within Lafarge's facility as well as any operational activity associated with the plant operation, considering the following circumstances:
 - 1) Emissions that are, or likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interfere with enjoyment of life and property;
 - 2) Fugitive dust emissions or evidence of inadequate fugitive dust control measures;

- 3) Evidence of fallout materials and any physical or chemical associations with plant-site activities;
- 4) Materials tracked onto paved roads open to the public;
- 5) Emissions of odor-bearing air contaminants;
- 6) Equipment operating in such a manner as can reasonably be expected to contribute emissions that can result in fallout complaints;
- 7) Emissions due to startup, shutdown, malfunction or emergencies as defined in WAC 173-400-107 or WAC 173-401-645;
- 8) Emissions caused by noncompliance with applicable requirements of this permit; and
- 9) Any complaints relating to other applicable requirements of this permit.

(iii) If Lafarge identifies its plant (or any associated operational activity) as the source contributing to air pollution complaints, Lafarge shall use good industrial practices to minimize emissions including shutting down an emission unit within 24 hours of identification, while following requirements of this permit, and keeping records required in Section II.A.1(f).

[WAC 173-401-615(1) and WAC 173-401-615(2), 10/17/02]

(c) Facility-Wide Inspections

Lafarge shall conduct a roof-top¹ inspection and a facility-wide inspection at least monthly. These inspections shall include checking for prohibited activities under Section III of the permit and activities that require additional approval under Section IV of the permit. The inspections shall also examine the general state of compliance with the generally applicable requirements and the general effectiveness of the Operation & Maintenance (O&M) Plan.

Both the roof-top and facility-wide inspections shall include an inspection for odor-bearing contaminants and emissions of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interfere with enjoyment of life and property.

Whenever Lafarge engages in construction or other activities of a temporary nature that are likely to generate fugitive dust, fallout or track-out, Lafarge shall conduct inspections each day of activity for fugitive dust and track-out.

Lafarge shall inspect the facility for the following:

- 1) Proper operation;

¹ A “roof-top inspection” is an inspection of the overall facility from a sufficient height to allow the determination of the point(s) of origin and possibly the cause(s) of observed opacity.

- 2) Visible emissions while the emission generating equipment is operating, and
- 3) Evidence of fugitive dust or fallout, such as particulate matter, visible inside and near the exit of the exhaust duct or area of activity.

Lafarge shall begin corrective action for any problems, such as excessive corrosion or damage to production or air pollution control equipment or improper material handling operations, that cause or are likely to cause violations of any of the terms or conditions of this permit as soon as possible, but not later than within 24 working hours.

[Puget Sound Clean Air Agency Regulation I, Section 7.09(b)(6), (9/10/1998)], [WAC 173-401-615(1) and WAC 173-401-615(2)(a), 10/17/02].

(d) General Fugitive Dust

Lafarge shall conduct visual facility-wide inspections at least weekly for fugitive dust. If any fugitive dust is observed or if any track-out onto West Marginal Way is observed, Lafarge shall clean the area within 24 hours, and Lafarge shall employ preventive measures as described by the Operation & Maintenance (O&M) Plan.

[Puget Sound Clean Air Agency Regulation I, Section 9.15, (8/10/1998)], [WAC 173-400-040(3) & (8) (11/4/93)]

(e) Maintenance and repair of insignificant emission units

Lafarge shall use good industrial practices to maintain insignificant emission units and equipment² not listed in this permit. For such equipment, Lafarge shall also promptly repair defective equipment. Good industrial practices may include, but are not limited to, following the manufacturer's operations manual or an equipment operations schedule, minimizing emissions until the repairs can be completed, and taking measures to prevent recurrence of the problem.

[Puget Sound Clean Air Agency Regulation I, Section 9.20 (6/09/88)], [WAC 173-400-101(4) (4/22/95)]

(f) Recordkeeping, Facility-wide General Requirements

Lafarge shall maintain the following:

- 1) Records of required monitoring information that include the following if applicable:
 - a) The date, place as defined in the permit, and time of sampling or measurements;
 - b) The date(s) analyses were performed;
 - c) The company or entity that performed the analyses;
 - d) The analytical techniques or methods used;
 - e) The results of such analyses; and

² *Puget Sound Clean Air Agency Regulation I, Section 1.07(s) states, "EQUIPMENT means any stationary or portable device or any part thereof that emits or may emit any air contaminant into the atmosphere."*

f) The operating conditions existing at the time of sampling or measurement.

[WAC 173-401-615(2), 10/17/02]

- 2) Records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[WAC 173-401-615(2)(b), 10/17/02]

- 3) Records of all monitoring data and support information required by this permit shall be retained by Lafarge for a period of five years from the date of the monitoring, sample, measurement, record, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[WAC 173-401-615(2), 10/17/02]

- 4) Lafarge shall document all inspections, tests and other actions required by the O&M Plan and Section II.A of this permit, including who conducted the inspection, tests or other actions; and the date and the results of the inspection, tests or other actions including corrective actions. All such records shall be signed and dated. Lafarge shall maintain records of all inspections, tests, and other actions required by the O&M Plan on site and available for Puget Sound Clean Air Agency review.

[Puget Sound Clean Air Agency Regulation I, Section 7.09(b)(6), (9/10/1998)], [WAC 173-400-101(4) (4/22/95)]

- 5) Records for all complaints received concerning odor, fugitive emissions or nuisance relating to Section II of this permit must also contain the following information:
- a) Date and time of the complaint,
 - b) Name of the person complaining, if known,
 - c) Nature of the complaint, and
 - d) Date, time and nature of any corrective action taken.

[Puget Sound Clean Air Agency Regulation I, Section 7.09(b)(6), 9/10/1998], [WAC 173-401-615(2), 10/17/02]

2. Specific Monitoring

(a) Opacity CEMS

- i. Continuous Monitoring. Lafarge shall operate a continuous emission monitoring system (CEMS) for opacity for the main kiln stack and the clinker cooler baghouse.
- ii. Data Recovery. Lafarge shall recover valid hourly monitoring data for at least 95% of the hours that the kiln and cooler are operated during each calendar month except for periods of monitoring system downtime, provided that Lafarge demonstrates to the Control Officer that the downtime was not a result of inadequate design, operation, or

maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner.

iii. Quality Assurance. Lafarge shall operate a continuous emission monitoring system that meets the performance specification in 40 CFR Part 60, Appendix B in effect at the time of its installation, and Lafarge shall operate this monitoring system in accordance with the U.S. Environmental Protection Agency's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA 340/1-86-010).

iv. Data Recording. Monitoring data commencing on the clock hour and containing at least 45 minutes of monitoring data shall be reduced to 1-hour averages. Monitoring data for opacity shall also be reduced to 6-minute averages. All monitoring data shall be included in these averages except for data collected during calibration drift tests and for data collected subsequent to a failed quality assurance test or audit.

v. Data Retention: Lafarge shall retain all monitoring data for at least 5 years, including copies of all reports submitted to the Agency and records of all repairs, adjustments, and maintenance performed on the monitoring system.

vi. Relative Accuracy Tests. All relative accuracy tests shall be subject to the provisions of Regulation I, Section 3.07.

[Puget Sound Clean Air Agency Regulation I, Section 12.01 & 12.03, 4/9/98]

(b) SO₂ CEMS

i. Continuous Monitoring. Lafarge shall operate a continuous emission monitoring system (CEMS) for SO₂ for the kiln main stack.

ii. Data Recovery. Lafarge shall recover valid hourly monitoring data for at least 95% of the hours that the kiln is operated during each calendar month except for periods of monitoring system downtime, provided that Lafarge demonstrates to the Control Officer that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner.

iii. Quality Assurance. Lafarge shall operate a continuous emission monitoring system that meets the performance specification in 40 CFR Part 60, Appendix B in effect at the time of its installation, and Lafarge shall operate this monitoring system in accordance with the U.S. Environmental Protection Agency's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA 340/1-86-010).

iv. Data Recording. Monitoring data commencing on the clock hour and containing at least 45 minutes of monitoring data shall be reduced to 1-hour averages. All monitoring data shall be included in these averages except for data collected during calibration drift tests and for data collected subsequent to a failed quality assurance test or audit.

v. Data Retention: Lafarge shall retain all monitoring data for at least 5 years, including copies of all reports submitted to the Agency and records of all repairs, adjustments, and maintenance performed on the monitoring system.

vi. Relative Accuracy Tests. All relative accuracy tests shall be subject to the provisions of Regulation I, Section 3.07.

[Puget Sound Clean Air Agency Regulation I, Section 12.01 & 12.03, 4/9/98]

(c) Tire Derived Fuel Monitoring

Lafarge shall record the daily quantity of waste derived fuels burned in the kiln, the Btu content of tire derived fuel and the percentage of total kiln heat in accordance with the Tire Derived Fuels Plan, which is incorporated with the Waste Derived Fuel Usage and Monitoring Plan for the plant.

[Order of Approval 3374, Condition No. 5, 7/10/91]

[WAC 173-401-615(1) and WAC 173-401-615(2), 10/17/02]

(d) Alternate Opacity Monitoring

Lafarge shall conduct annual 1-hour particulate source tests per Puget Sound Clean Air Agency Method 5 while collecting 1-hour CEMS opacity values on the kiln stack per Regulation I, Section 3.07 during normal operations.

Lafarge shall submit annual reports correlating 1-hour CEMS opacity values with 1-hour particulate concentrations.

Lafarge shall either:

(A) Verify the alternate opacity limit of Order of Approval No. 5183 Condition No. 4 continues to accurately indicate a violation of the particulate standard of Regulation I, Section 9.09, or;

(B) Submit a request to Puget Sound Clean Air Agency to modify the alternate opacity limit in Order of Approval 5183, Condition No. 4 following Regulation I, Article 6, within 6 months of the annual test, with information satisfying Regulation I, Section 9.04(d)(2).

[Order of Approval No. 5183, Condition No. 5, 2/9/94]

(e) PM10 Clinker Cooler Monitoring

Lafarge shall monitor and record the daily use of the lower and upper clinker cooler baghouses to verify they are not operated at the same time during normal operating conditions.

[WAC 173-401-615(1) and WAC 173-401-615(2), 10/17/02]

(f) PM10 Monitoring

Puget Sound Clean Air Agency may require Lafarge to complete source tests of baghouses with sustained visible emissions unless Puget Sound Clean Air Agency considers emissions to be unavoidable when Lafarge following procedures in WAC 173-400-107.

[Order of Approval No. 5627, Condition No. 6, 12/27/94]

(g) Cement Kiln Dust Recycle System Visible Emission Monitoring

Lafarge shall monitor the CKD recycle BH for visible emissions, evidence of fugitive dust and fallout at least one/week while operating.

If visible emissions, fugitive dust or fallout are found, Lafarge shall within 24-hours make corrections until no visible emissions, fugitive dust or fallout occur, or shut down the equipment venting to the BH as specified in an Operation and Maintenance Plan.

Lafarge shall document these corrective actions, maintain these records on site for at least five years, and make them available to Puget Sound Clean Air Agency personnel upon request.

[Order of Approval No. 8022, Condition No. 5, 2/23/00]

(h) Waste Derived Fuel Monitoring

(1) Monitor Used Oils Characteristics

Lafarge shall monitor the analysis of used oil delivered for burning in the kiln as replacement fuel to verify compliance with WAC 173-303-090 Dangerous Waste Characteristics and WAC 173-303-515 Standards for the Management of Used Oil using the procedures in the Waste Derived Fuel Usage and Monitoring Plan for this plant.

[WAC 173-401-615(1), 10/17/02]

[Order of Approval No. 6202, Condition No. 8, 11/15/95]

(2) Monitor Fuel Btu Content

Lafarge shall monitor and record the daily Btu content of used oils burned in the kiln as replacement fuels and the percentage of total kiln heat as determined by the procedures in the Waste Derived Fuel Usage and Monitoring Plan for this plant.

[WAC 173-401-615(2), 10/17/02]

[Order of Approval 6202, Condition No. 8, 11/15/95]

(3) Monitor Fuels Meet WAC Definitions

Replacement fuels shall be defined in the Waste Derived Fuel Usage and Monitoring Plan including the definitions of the following fuels:

(a) Used Oil; (b) Refined Oil Tank Bottoms; (c) Raw Crude Tank Bottoms; (d) Heavy Vacuum Gas Oil Waste; (e) Off Specification Fuel Oil.

[Order of Approval No. 6202, Conditions 6 & 8, 11/15/95]

(4) Fuel Parameters

Lafarge shall obtain fuel analysis documentation for all fuel deliveries and Lafarge shall maintain records on site.

[Order of Approval No. 6202, Condition Nos. 7 & 8, 11/15/95]

(5) Waste Derived Fuel Usage & Monitoring Plans

(a) Yearly Update of O&M Plan

Lafarge shall follow its approved Waste Derived Fuel Usage and Monitoring Plan which shall be reviewed annually. Lafarge shall request approval (including justification) for any updates to the Waste Derived Fuel Usage and Monitoring Plan.

[Order of Approval No. 6202, Condition 8, 11/15/95] [WAC 173-401-615(3), 10/17/02]

(b) Yearly Report Changes in O&M Plan

Lafarge shall annually report to Puget Sound Clean Air Agency any changes or modification to the updated Waste Derived Fuel Usage and Monitoring Plan.

[Order of Approval No. 6202, Condition 8, 11/15/95] [WAC 173-401-615(3), 10/17/02]

(c) Fuel Testing Procedures in O&M Plan

Lafarge shall maintain a Waste Derived Fuel Usage and Monitoring Plan and update it annually, including the following:

- a. The monitoring and testing procedures for the waste derived fuels burned in the kiln including;
 - i. Type and quantity of fuel burned (i.e., lb, gal, raw crude, heavy vacuum gas)
 - ii. Names and address of sources and suppliers of fuels
 - iii. Fuel parameters (i.e., Btu content, % ash, etc.);
 - iv. Fuel testing frequency (i.e., monthly, per shipment, etc.)
 - v. The sample and analytical testing methods (i.e., EPA or ASTM methods);
 - vi. The analytical and sampling procedures for heat input from replacement fuel.
- b. A source test plan with sampling methods, analytical procedures and testing date for demonstrating compliance with the emission standards of Regulation I, Article 9 and Order of Approval No. 5183

[Order of Approval No. 6202, Condition 8(a) & (b) 11/15/95] [WAC 173-401-615(3), 10/17/02]

(i) NESHAPS General Monitoring

Lafarge shall adopt and follow an SSM plan which meets the requirements of 40 CFR 63. That plan shall be available for review upon request by Puget Sound Clean Air Agency. Recordkeeping and reporting of SSM plan provisions are described in Section II.A.2(j) of this permit. The SSM plan may be revised without modifying this permit, except as noted in 40 CFR 63.6(e)(viii).

(j) Subpart LLL Monitoring & Compliance Provisions

(1) Performance Testing Requirements

(a) Lafarge shall comply with emission limits of 40 CFR 63.1343(d)(2) per methods in 40 CFR 63.1349(b) and 40 CFR 63.7, and the performance test report of 40 CFR 63.10 shall meet the following:

- (1) A description of the process and the air pollution control system;
- (2) Sampling location description(s);
- (3) Describe sampling and analytical procedures including modifications;
- (4) Test results;
- (5) Quality assurance procedures and results;
- (6) Operating conditions during tests, standards, and calibrations;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data used to establish parameters for compliance monitoring;
- (10) Any other information required by the test method; and
- (11) This report shall be submitted within 60 days of finishing the performance test.

(b) Lafarge shall demonstrate initial compliance by completing a performance test on the kiln for dioxin tests per 40 CFR 60, Appendix A, Method 23. The performance test shall include:

- (1) Three separate runs per test; with kiln operating at highest capacity level reasonably expected to occur; at least three hours per run, with at least 90 dscf (2.5 dscm). Compliance is determined by averaging the three run concentrations.
- (2) The ESP inlet temperature shall be continuously recorded during dioxin tests.
- (3) Calculate one-minute average temperatures each minute of each test run.
- (4) Average, the one-minute average temperature during each run, and average the three average run temperatures for the temperature limit in 40 CFR 63.1344(b).

[40 CFR 63, Subpart LLL, 6/14/99]

(c) Lafarge shall repeat D/F Kiln testing every 30 months per 40 CFR 63.1349(b)(3).

(d) Lafarge shall repeat D/F kiln tests per 40 CFR 63.1349(b)(1) & (3), within 90 days of any significant change (as defined in the O&M Plan) in feed or fuel from previous performance tests.

(2) O & M Plan Requirements

(a) Lafarge shall prepare an O&M Plan for affected sources (as listed in O&M Plan) per 40 CFR 63.1350(a) and submit to Puget Sound Clean Air Agency for approval including:

- (1) The O&M procedures to meet standards of 40 CFR 63.1343 through 40 CFR 63.1348;
- (2) Corrective actions as required by 40 CFR 63.1350(e); and
- (3) Annual kiln combustion system inspections (defined in O&M Plan);

(b) Failure to comply with any provision of the O&M Plan per 40 CFR 63.1350(a) shall be a violation of the standards of 40 CFR 63.1343 through 40 CFR 63.1348.

[40 CFR 63, Subpart LLL, 6/14/99]

(3) Install & Operate Temperature Monitor

(a) Lafarge shall operate a quarterly calibrated continuous temperature monitor at the ESP inlet for recording 3 hour rolling average temperatures for dioxin and furan (D/F) emissions. Lafarge shall monitor D/F emissions by the following:

- (1) Recorder response range shall include zero and 1.5 times either of the average temperatures established per 40 CFR 63.1349(b)(3)(iv);
- (2) NIST calibrated reference thermocouple-potentiometer system shall be the reference method unless an alternate method is approved by Puget Sound Clean Air Agency;
- (2) The monitor shall continuously record the kiln inlet ESP temperature;
- (3) Every 3-hour rolling average temperature shall be no less than the average of 180 successive one-minute average temperatures; and
- (4) If a one-minute average is unavailable it shall not be included in the rolling average, and when the first full one-minute average temperature becomes available it shall be added to the previous 179 successive one-minute values for the 3-hour rolling average.

(b) Lafarge shall inspect the components of the kiln combustion system once per year.

[40 CFR 63, Subpart LLL, 6/14/99]

(4) Compliance Dates

Lafarge shall demonstrate compliance with the provisions of 40 CFR 63, Subpart LLL by July 14, 2002 and as identified in 40 CFR 63.7.

[40 CFR 63.1351(a), 5/5/02]

(k) NESHAPS Notification, Reporting & Recordkeeping

(1) Notification requirements

Lafarge shall comply with the notification requirements in 40 CFR 63.9 as follows:

- (1) Initial notifications per 40 CFR 63.9(b) through (d), (may be Operating Permit application if it contains all required information per 40 CFR 63.9(b).
- (2) Notifications of performance test per 40 CFR 63.7 and 40 CFR 63.9(e).
- (3) Notification of compliance status per 40 CFR 63.9(h).

[40 CFR 63, Subpart LLL, 6/14/99]

(2) Reporting requirements

Lafarge shall include the following in a semiannual report following 40 CFR 63.10:

- (1) Report any performance test results per 40 CFR 63.10(d)(2), which requires the report to be submitted within 60 days of finishing the performance test.
- (2) Semiannual reports per 40 CFR 63.10(d)(5), for startup, shutdown or malfunction (SSM) (including corrective actions), as specified in 40 CFR 63.6(e)(3) for only those incidences that occur. This report may be submitted with reports for excess emissions and CMS performance.
- (3) Report within two working days (telephone, FAX or e-mail) of any actions inconsistent with the SSM Plan, and submit a letter within 7 working days after the end of the event, certified by a responsible official, explaining: circumstances of event; reasons for not following SSM Plan, and if there are any excess emissions, or if parameter monitors indicates excess emissions.
- (4) Report per 40 CFR 63.10(e)(2), results of performance evaluations for the CMS per 40 CFR 63.8(e) submitted simultaneously with the performance test results.
- (5) Report per 40 CFR 63.10(e)(3), excess emissions and CMS performance report when operating parameter limits are exceeded.
- (6) Report semiannually per 40 CFR 63.10(e)(3)(vi) summarizing the following:
 - (i) Times when ESP inlet temperature exceed the maximum limit per 40 CFR 63.1344(a) and (b);
 - (ii) Times when thermocouples per 40 CFR 63.1350(f)(1) are not calibrated; and
 - (iv) Results of combustion system component inspections per 40 CFR 63.1350(i).
 - (iv) Failures to comply provision of the O&M Plan per 40 CFR 63.1350(a).

- (7) Whenever the total CMS down time is $\geq 10\%$ of the operating time per reporting period, report excess emissions and CMS or parametric monitor performance with the summary report of 40 CFR 63.1354(b)(9).

[40 CFR 63, Subpart LLC, 6/14/99]

(3) Recordkeeping requirements

(a) Lafarge shall retain files for 5 years and be available for inspectors per 40 CFR 63.10(b)(1). The files shall include: date of events, measurements, maintenance and corrective actions. The files may be maintained on microfilm, computer, floppy disks, magnetic tape, or microfiche.

(b) Lafarge shall maintain records per 40 CFR 63.10(b)(2) & (3); including:

- (1) All documentation for initial notifications of compliance status under 40 CFR 63.9;
- (2) All records of applicability determination and supporting analyses; and
- (3) All records needed for waivers granted per 40 CFR 63.8(f)(6).

(c) Lafarge shall maintain all records required by 40 CFR 63.10(c) for the CEMS.

[40 CFR 63, Subpart LLL, 6/14/99]

B. Operation and Maintenance (O&M) Plan Requirements

Lafarge's O&M Plan shall include procedures specifying how Lafarge will assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II and III. For insignificant emission units, refer to the requirements stated in Section IV.AA, Insignificant Units and Activities. The Plan shall reflect good industrial practice. In most instances, following the manufacturer's operations manual or equipment operational schedule, minimizing emissions until the repairs can be completed and taking measures to prevent recurrence of the problem may be considered good industrial practice. Determination of whether good industrial practice is being used will be based on available information such as monitoring results, opacity observations, review of operations and maintenance procedures, and inspections of the emission unit or equipment. The specific provisions of the O&M Plan, other than those required by Section II.A, shall not be deemed part of this permit.

[Puget Sound Clean Air Agency, Regulation I, Section 7.09(b) 9/10/98]

III. PROHIBITED ACTIVITIES

Lafarge is prohibited from conducting, causing, or allowing the following activities:

A. Adjustment for Atmospheric Conditions

Varying the rate of emissions of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant is prohibited, except as directed according to air pollution episode regulations. [WAC 173-400-205, 8/20/93]

B. Open Burning

Lafarge shall not conduct open burning during any stage of an air pollution episode or period of impaired air quality and shall not conduct any open burning other than the following types:

1. Fires consisting solely of charcoal, propane, natural gas, or wood used solely for the preparation of food that comply with WAC 173-425-020(1) and WAC 173-425-030(21) and
2. Fires for instruction in the methods of fighting fires, provided that the person conducting the training fire complies with Puget Sound Clean Air Agency Regulation I, Section 8.07.

[Puget Sound Clean Air Agency Regulation I, Sections 8.04(a), 11/09/2000 and 8.07, 9/09/1999] [WAC 173-425-020(1), 3/13/2000; WAC 173-425-030(21), 3/13/2000; RCW 70.94.743, 1998 c68 p1 and RCW 70.94.775(2), 1995 c362 p2 State/Puget Sound Clean Air Agency only]

C. Refuse Burning

Lafarge shall not cause or allow the burning of combustible refuse except in a multiple chamber incinerator provided with control equipment. Lafarge shall not operate refuse burning equipment any time other than daylight hours. [Puget Sound Clean Air Agency Regulation I, Section 9.05, 12/9/93]

D. Concealment

Lafarge shall not cause or allow the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of an air contaminant which would otherwise violate Puget Sound Clean Air Agency Regulation I, Article 9 or Chapter 173-400 WAC. [Puget Sound Clean Air Agency Regulation I, Section 9.13(a), 6/9/88; WAC 173-400-040(7), 8/20/93]

E. Masking

Lafarge shall not cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant that causes detriment to health, safety or welfare of any person or conceals or masks an emission of an air contaminant that would otherwise violate Regulation I, Article 9 or Chapter 173-400 WAC. [Puget Sound Clean Air Agency Regulation I, Section 9.13(b), 6/9/88; and WAC 173-400-040(7), 8/20/93]

F. Ambient Standards

Lafarge shall not cause or allow the emission of air contaminants in sufficient quantity as to exceed any ambient air quality standard in Puget Sound Clean Air Agency Regulation I Section 11.01. [Puget Sound Clean Air Agency Regulation I, Section 11.01(b), 4/14/94]

G. Tampering

LaFarge shall not render inaccurate any monitoring device or method required under Chapter 70.94 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto. [WAC 173-400-105(8), 8/21/98 *STATE ONLY*]

H. False Statements

LaFarge shall not make any false material statement, representation or certification in any form, notice or report required under Chapter 70.94 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto. [WAC 173-400-105(7), 8/21/98 *STATE ONLY*]

IV. ACTIVITIES REQUIRING ADDITIONAL APPROVAL

Lafarge shall file notification and obtain the necessary approval from Puget Sound Clean Air Agency before conducting any of the following:

A. New Source Review

Lafarge shall not construct, install, establish, or modify an air contaminant source, except those sources that are excluded by Puget Sound Clean Air Agency Regulation I, Section 6.03(b), unless a “Notice of Construction and Application for Approval” has been filed with and approved by Puget Sound Clean Air Agency. [Puget Sound Clean Air Agency Regulation I, Section 6.03, 7/12/01] [WAC 173-460-040 State/Puget Sound Clean Air Agency only]

B. Replacement or Substantial Alteration of Emission Control Technology

Lafarge shall file a Notice of Construction and Application for Approval according to WAC 173-400-114 with Puget Sound Clean Air Agency before replacing or substantially altering any emission control technology installed at the facility. [Puget Sound Clean Air Agency Regulation I, Section 6.03, 7/12/01] [WAC 173-400-114, RCW 70.94.153, 1991 c 199p303 State/Puget Sound Clean Air Agency only]

C. Asbestos

1. Lafarge shall comply with 40 CFR 61.145 and 61.150 when conducting renovation or demolition activities at the facility. [40 CFR 61.145, 4/7/1993 and 61.150, 1/16/1991]
2. Lafarge shall comply with Puget Sound Clean Air Agency Regulation III, Article 4 when conducting any asbestos project, renovation, or demolition activities at the facility. [Puget Sound Clean Air Agency Regulation III, Article 4, 7/13/00]

D. Spray Coating

1. Lafarge shall obtain prior approval under Puget Sound Clean Air Agency Regulation I, Section 9.16(a) for causing or allowing the use of spray equipment to apply any VOC-containing material except for:
 - a. The use of hand-held aerosol cans,
 - b. Touch-up operations,
 - c. The coating of marine vessels in dry docks,
 - d. The coating of bridges, water towers, buildings or similar structures,
 - e. Insecticide, pesticide, or fertilizer spray equipment, and
 - f. The coating of items that cannot be reasonably handled in an enclosed spray area, provided that the operation has received the prior written approval of the Control Officer.

[Puget Sound Clean Air Agency Regulation I, Section 9.16, 6/13/91]

- (a) **Exemptions.** The following activities are exempt from the provisions of Sections 9.16(c) and (d) of this regulation. Persons claiming any of the following spray-coating exemptions shall have the burden of demonstrating compliance with the claimed exemption.
- (1) Application of architectural or maintenance coatings to stationary structures (e.g., bridges, water towers, buildings, stationary machinery, or similar structures);
 - (2) Aerospace coating operations subject to 40 CFR Part 63, Subpart GG. This includes all activities and materials listed in 40 CFR 63.741(f);
 - (3) Use of high-volume, low-pressure (HVLP) spray guns when:
 - (a) Spray-coating operations do not involve motor vehicles or motor vehicle components;
 - (b) The gun cup capacity is 8 fluid ounces or less;
 - (c) The spray gun is used to spray-coat less than 9 square feet per day per facility;
 - (d) Coatings are purchased in containers of 1 quart or less; and
 - (e) Spray-coating is allowed by fire department, fire marshal, or other government agency requirements.
 - (4) Use of air-brush spray equipment with 0.5 to 2.0 cfm airflow and a maximum cup capacity of 2 fluid ounces;
 - (5) Use of hand-held aerosol spray cans with a capacity of 1 quart or less; or
 - (6) Indoor application of automotive undercoating materials using organic solvents having a flash point in excess of 100°F.

- (b) **General Requirements for Indoor Spray-Coating Operations.** It shall be unlawful for any person subject to the provisions of this section to cause or allow spray-coating inside a structure, or spray-coating of any motor vehicles or motor vehicle components, unless the spray-coating is conducted inside an enclosed spray area. The enclosed spray area shall employ either properly seated paint arrestors, or water-wash curtains with a continuous water curtain to control the overspray. All emissions from the spray-coating operation shall be vented to the atmosphere through an unobstructed vertical exhaust vent.
- (c) **General Requirements for Outdoor Spray-Coating Operations.** After January 1, 2000, it shall be unlawful for any person subject to the provisions of this section to cause or allow spray-coating outside an enclosed structure unless such spray-coating operations are approved in a notice of construction permit issued in accordance with Article 6 of this regulation. The following minimum requirements for outdoor spray-coating operations will be included in all such notice of construction permits:
- (1) Reasonable methods to confine overspray to the property where the spray-coating is being conducted shall be used (e.g., tarps, shrink wrap, mobile enclosure, or similar methods for control of overspray); and
 - (2) High-transfer efficiency spray equipment that minimizes overspray shall be used (e.g., HVLP, low-volume, low-pressure (LVLP), electrostatic, or air-assisted airless). Airless spray equipment may be used where low viscosity and high solid coatings preclude the use of higher-transfer efficiency spray equipment.

[Puget Sound Clean Air Agency Regulation I, Section 9.16, 7/12/01, State/Puget Sound Clean Air Agency only; however, will become federally enforceable when EPA incorporates it into the SIP]

V. STANDARD TERMS AND CONDITIONS

A. Duty to comply

Lafarge shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 70.94 RCW and, for federally enforceable provisions, a violation of the Federal Clean Air Act (FCAA). Such violations are grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application. [Puget Sound Clean Air Agency Regulation I, Section 7.05, 10/28/93, WAC 173-401-620(2)(a), 11/4/93]

B. Permit actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by Lafarge for a permit modification, revocation and re-issuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c), 11/4/93]

C. Property rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d), 11/4/93]

D. Duty to provide information

Lafarge shall furnish to the Puget Sound Clean Air Agency, within a reasonable time, any information that the Puget Sound Clean Air Agency may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, Lafarge shall also furnish to the Puget Sound Clean Air Agency copies of records required to be kept by the permit or, for information claimed to be confidential, Lafarge may furnish such records directly to EPA Region 10 along with a claim of confidentiality. The Puget Sound Clean Air Agency shall maintain the confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e), 11/4/93]

E. Permit fees

Lafarge shall pay fees as a condition of this permit in accordance with the Puget Sound Clean Air Agency Regulation I, Article 7. Failure to pay fees in a timely fashion shall subject Lafarge to civil and criminal penalties as prescribed in Chapter 70.94 RCW. [WAC 173-401-620(2)(f), 11/4/93]

F. Emissions trading

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g), 11/4/93]

G. Severability

If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h), 11/4/93]

H. Permit appeals

This permit or any condition in it may be appealed only by filing an appeal with the Pollution Control Hearings Board and serving it on the Puget Sound Clean Air Agency within thirty days of receipt, pursuant to RCW 43.21B.310 and WAC 173-401-735. The provision for appeal in this section is separate from and additional to any federal rights to petition and review found under §505(b) of the FCAA. [WAC 173-401-620(2)(i) and WAC 173-401-735, 11/4/93]

I. Permit continuation

This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted under WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete permit application has been submitted. [WAC 173-401-620(2)(j), 11/4/93]

J. Federal enforceability

All terms and conditions of this permit are enforceable by the EPA administrator and by citizens under the FCAA, except for those terms and conditions designated in the permit as not federally enforceable. [WAC 173-401-625, 11/4/93]

K. Inspection and entry

Upon presentation of credentials and other documents as may be required by law, Lafarge shall allow the Puget Sound Clean Air Agency or an authorized representative to:

1. Enter Lafarge's premises or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit; and
4. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [WAC 173-401-630(2) 11/4/93] [RCW 70.94.200 State/Puget Sound Clean Air Agency only]

L. Compliance requirements

1. General Compliance Requirements

Lafarge shall continue to comply with all applicable requirements with which the source is currently in compliance. Lafarge shall meet on a timely basis any applicable requirements that become effective during the permit term. [WAC 173-401-630(3), WAC 173-401-510(2)(h)(iii) 11/4/93]

2. Lafarge North America, Inc. (Seattle) Compliance Schedule, (effective date is the issued date of the modified permit)

1. Background

Solid waste fuel firing was originally approved at Lafarge in Notice of Construction Orders of Approval No. 3374 (7/10/91), which approved tire derived fuel; and No. 6202 (11/15/95), which approved waste oil derived streams. Subsequent to the publication of the draft air operating permit for Lafarge, the Puget Sound Clean Air Agency has determined that WAC 173-434 (effective date 10/18/90) applies to the Lafarge plant in Seattle because it is defined as a solid waste incinerator facility that began burning more than 12 tons of fuel after January 1, 1985. This regulation is the SIP approved version. A revised WAC 173-434 (effective date 1/22/04) changes the definition of solid waste which will change the applicability of this regulation to Lafarge. Once EPA approves the revised WAC 173-434 as part of the SIP, the historically approved waste fuels will not be classified as solid waste and this regulation will no longer apply to Lafarge. Based on this determination, the Agency has included WAC 173-434 as an applicable requirement.

WAC 173-434-130(3) requires that SO₂ emissions shall not exceed 50 ppmv (at 7% O₂); or demonstrate 80 percent SO₂ emission reduction of uncontrolled emissions; or when more than 50 percent of the heat input is fossil fuel, a higher SO₂ emission limit may be established through a best available control technology

(BACT) determination. WAC 173-434-160(6) requires that the inlet temperature of the primary particulate control device shall not exceed 350 degrees F.

Lafarge is currently not in compliance with WAC 173-434-130(3) because its SO₂ emission level is greater than 50 ppmv; it does not use SO₂ emission control technology to support an emission reduction demonstration; and while its heat input is greater than 50% from fossil fuel, there is no historical permit review which establishes Lafarge's current SO₂ emission levels as BACT. In addition, Lafarge is not in compliance with WAC 173-434-160(6), because the electrostatic precipitator (primary particulate control device) temperature typically exceeds 350 degrees F.

WAC 173-401-510(2)(h)(iii)(C) and WAC 173-401-630(3) require each operating permit to contain a compliance schedule for those applicable requirements the source is not in compliance with at the time of permit issuance. The only way Lafarge can comply with WAC 173-434-130(3) and 173-434-160(6) is to reduce the amount of solid waste burned to less than 12 tons per day. Therefore, a compliance schedule to reduce the amount of solid waste burned to less than 12 tons per day must be included in this Operating Permit.

2. Compliance Schedule

Pursuant to WAC 173-401-630(3), Lafarge is hereby ORDERED to take the following actions to come into compliance with the provisions of WAC 173-434-130(3) and WAC 173-434-160(6) in accordance with the following schedule:

- A. No later than September 10, 2005, Lafarge shall achieve compliance with WAC 173-434-130(3) and WAC 173-434-160(6) by reducing the amount of solid waste burned to less than 12 tons per day.
- B. Lafarge shall not burn solid waste fuels approved in Order of Approval No. 6202 (11/15/95) with ash content greater than 15% (by weight, daily average) after September 15, 2004.
- C. Lafarge shall not burn tire derived fuels approved in Order of Approval No. 3374 (7/10/91) at rates greater than 12 or more tons per day after September 15, 2004.
- D. On or before September 1, 2004, Lafarge shall submit an updated Waste Derived Fuel Usage and Monitoring Plan to document compliance with Paragraph 2A, 2B, and 2C of this compliance schedule.
- E. Lafarge shall comply with the monitoring, recordkeeping, and reporting requirements from WAC 173-434 (effective date 10/18/90), as specified in Appendix F of this permit.
- F. Lafarge shall communicate with EPA on a monthly basis to encourage timely processing of the SIP amendment related to WAC 173-434 and review progress to date regarding completion and publication in the Federal Register.
- G. Lafarge shall submit quarterly progress reports to the Agency, certified in

accordance with WAC 173-401-520, regarding progress towards achieving compliance with the terms of this compliance schedule. Progress reports are due on the last day of each calendar quarter.

- H. All elements of this compliance schedule shall be enforceable terms and conditions of this operating permit.
- I. Lafarge shall submit deviation reports as required by Section V.Q.1 (General Reporting) for failure to comply with the provisions of this compliance schedule.
- J. This compliance schedule shall be completely satisfied and no longer in effect once EPA approves the revised WAC 173-434 (effective date 1/22/04) into the Washington SIP. With that SIP approval, WAC 173-434 will no longer be an applicable requirement for the current Lafarge operations.

3. Effective Date

This Compliance Schedule is effective as of the date signed below.

Dated this _____ day of _____, 2004.

James Nolan
Director Compliance
Puget Sound Clean Air Agency

M. Compliance certifications

Lafarge shall submit a certification of compliance with permit terms and conditions once per year. The first such certification shall cover a one-year period commencing upon the date of issuance of this permit. Each certification shall include:

- 1. The identification of each term or condition of the permit that is the basis of the certification;
- 2. The compliance status;
- 3. Whether compliance was continuous or intermittent; and
- 4. The method(s) used for determining the compliance status of the source, currently and over the reporting period. These methods must be consistent with the permit Monitoring, Maintenance and Recordkeeping Methods.

All compliance certifications shall be submitted to EPA Region 10 and to Puget Sound Clean Air Agency, at the following addresses, within 30 days after the close of the period covered by the certification:

Puget Sound Clean Air Agency
Attn.: Operating Permit Certification
110 Union Street, Suite 500
Seattle, Washington 98101

EPA Region 10, Mail Stop OAQ-107
Attn.: Air Operating Permits
1200 Sixth Avenue
Seattle, Washington 98101

[WAC 173-401-630(5) 11/4/93]

N. Compliance determination

1. General Emission Testing

- i) For the purpose of determining compliance with an emission standard, Puget Sound Clean Air Agency or Ecology may conduct testing of an emission unit or require Lafarge to have it tested. In the event Puget Sound Clean Air Agency or Ecology conducts the test, Lafarge shall be given an opportunity to observe the sampling and to obtain a sample at the same time. [Puget Sound Clean Air Agency Regulation I, Section 3.05(b), 2/10/94; WAC 173-400-105(4), 8/20/93, 10/23/98 State/Puget Sound Clean Air Agency only]
- ii) Testing of sources for compliance with emissions standards shall be performed in accordance with the Reference Test Methods identified in Section I of this permit, except where this permit indicates that a specific Reference Test Method is not needed or appropriate. [Puget Sound Clean Air Agency Regulation I, Section 3.07(a), 2/9/95]
- iii) Lafarge shall notify Puget Sound Clean Air Agency in writing at least 2 weeks (14 days) prior to any compliance test and provide Puget Sound Clean Air Agency an opportunity to review the test plan and to observe the test. [Puget Sound Clean Air Agency Regulation I, Section 3.07(b), 2/9/95]
- iv) Unless otherwise specified, each test for pollutants other than opacity shall consist of three separate runs and compliance shall be determined from the arithmetic average of the three runs. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of circumstances beyond the operator's control, compliance may, upon the Puget Sound Clean Air Agency approval, be determined from the arithmetic average of the two other runs. [Puget Sound Clean Air Agency Regulation I, Section 3.07(a), 2/9/95]
- v) If required by Puget Sound Clean Air Agency to perform a compliance test, Lafarge, shall submit a report to Puget Sound Clean Air Agency no later than 60 days after the test. The report shall include:

- (a) A description of the source and the sampling location;
- (b) The time and date of the test;
- (c) A summary of results, reported in units and for averaging periods consistent with the applicable emission standard;
- (d) A description of the test methods and quality assurance procedures employed;
- (e) The amount of fuel burned and raw material processed by the source during the test;
- (f) The operating parameters of the source and control equipment during the test;
- (g) Field data and example calculations; and
- (h) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

[WAC 173-400-105(4), 10/14/96 State/Puget Sound Clean Air Agency only; and Puget Sound Clean Air Agency Regulation I, Section 3.07, 2/9/95]

2. Credible Evidence

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [Puget Sound Clean Air Agency Regulation I, Section 3.06; 10/08/98; 40 CFR 51.212, 40 CFR 52.12, 40 CFR 52.33]

O. Recordkeeping

Lafarge shall maintain the following:

1. Records of required monitoring information that include the following if applicable:
 - i) The date, place as defined in the permit, and time of sampling or measurements;
 - ii) The date(s) analyses were performed;
 - iii) The company or entity that performed the analyses;
 - iv) The analytical techniques or methods used;
 - v) The results of such analyses; and
 - vi) The operating conditions existing at the time of sampling or measurement.

[WAC 173-401-615(2), 10/17/02]

2. Records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-615(2), 10/17/02]
3. Records of all monitoring data and support information required by this permit shall be retained by Lafarge for a period of five years from the date of the monitoring, sample, measurement, record or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [WAC 173-401-615(2), 10/17/02]
4. Lafarge shall document all inspections, tests and other actions required by the O&M Plan and Section II.A of this permit, including who conducted the inspection, tests or other actions; and the date and the results of the inspection, tests or other actions including corrective actions. All such records shall be signed and dated. Lafarge shall maintain records of all inspections, tests, and other actions required by the O&M Plan on site and available for Puget Sound Clean Air Agency review. [Puget Sound Clean Air Agency Regulation I, Section 7.09(b), 9/10/98]
5. Records for all complaints received concerning odor, fugitive emissions or nuisance relating to Section II of this permit must also contain the following information:
 - i) The date and time of the complaint,
 - ii) The name of the person complaining, if known,
 - iii) The nature of the complaint, and
 - iv) The date, time, and nature of any corrective action taken.[WAC 173-401-615(2)(b), 10/17/02]

P. Data recovery

1. General

The specific monitoring and recordkeeping requirements identified in Section II of this permit contain data recovery requirements. However, if such requirements are silent on data recovery provisions, data recovery is assumed to be 100%.

[WAC 173-401-615(1)(b), 10/17/02]

2. [Reserved]

Q. Reporting

1. General Reporting

1. Any monitoring reports required by this permit to be submitted to Puget Sound Clean Air Agency shall be submitted at least once every six months, or more frequently where required by an applicable requirement, and received at Puget Sound Clean Air Agency or postmarked no later than 30 days after the end of the six-month reporting period. The first required monitoring report shall be submitted by January 30, 2002 and cover the period from date of issuance of this permit until December 31, 2001. All instances of deviations from permit requirements must be clearly identified in such reports. If there were no instances of deviations, the report must state that there were no instances of deviations. All required reports must be certified by a responsible official consistent with WAC 173-401-520. Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification needs to only be submitted once every six months, covering all required reporting since the date of the last certification, provided that the certification specifically identifies all documents subject to the certification. [WAC 173-401-615(3)(a), 10/17/02]
2. Lafarge shall report in writing to Puget Sound Clean Air Agency Operating Permit Certification all instances of deviations from the permit requirements, including those attributable to upset conditions as defined in this permit, the probable cause of the deviations, and any corrective actions or preventive measures taken. Lafarge shall maintain a contemporaneous record of all deviations. Lafarge shall report any deviations to Puget Sound Clean Air Agency Operating Permit Certification that represent a potential threat to human health or safety by FAX (206-343-7522) as soon as possible but no later than 12 hours after such a deviation is discovered. Lafarge shall report other deviations in writing to Puget Sound Clean Air Agency Operating Permit Certification no later than 30 days after the end of the month during which the deviation is discovered. [WAC 173-401-615(3)(b), 10/17/02]
3. Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520, 11/4/93]

2. Opacity and SO₂ CEMS Reporting

Lafarge shall submit a monthly report to Puget Sound Clean Air Agency Operating Permit Certification within 30 days after the end of the month in which the data were recorded. This report shall include:

- (i) The date, time period, magnitude (in the units of the standard) and cause of each emission that exceeded an applicable emission standard;
- (ii) The date and time of all actions taken to correct the problem, including any actions taken to minimize the emissions during period when excess emissions occur and any actions taken to prevent its recurrence;
- (iii) The number of hours that the equipment (required to be monitored) operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;
- (iv) The date, time period, and cause of each failure to meet the data recovery requirements of Regulation I, Section 12.03(b), and any actions taken to ensure adequate collection of such data;
- (v) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90% of the hours that the equipment (required to be monitored) was operated each day;
- (vi) The results of audits conducted during the month; and
- (vii) A certification of truth, accuracy, and completeness signed by an authorized representative of the owner or operator.

[Regulation I, Section 12.03(f), 4/9/98]

3. TDF/Waste Derived Fuel Summary Report

Lafarge shall submit a summary report documenting compliance with the requirements of EU 1.10 and EU 1.12 through EU 1.15 of this permit. The report shall summarize all monitoring and analysis information for the reporting period used to demonstrate compliance. The report shall be submitted within 30 days after the end of the month in which the data was recorded.

R. Emission reporting

Lafarge shall report annually to the Puget Sound Clean Air Agency for those air contaminants during the previous calendar year that equal or exceed the following (tons per year):

Carbon monoxide (CO) emissions	25
Facility combined total of all toxic air contaminants (TAC) emissions	6
Any single toxic air contaminant (TAC) emissions	2
Nitrogen oxide (NOx) emissions	25

Particulate matter (PM10) emissions	25
Particulate matter (PM2.5) emissions	25
Sulfur oxide (SO _x) emissions	25
Volatile organic compounds (VOC) emissions	25

Annual emissions rates shall be reported to the nearest whole ton per year for only those contaminants that equal or exceed the thresholds above. Lafarge shall submit to the Puget Sound Clean Air Agency any additional information required by WAC 173-400-105(1) or Puget Sound Clean Air Agency Regulation III, Section 1.11. [Puget Sound Clean Air Agency Regulation I, Section 7.09(a), 9/10/98]

S. Emergencies

An emergency, as defined in WAC 173-401-645(l), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the conditions of WAC 173-401-645(3) are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An emergency occurred and that Lafarge can identify the cause(s) of the emergency;
2. The permitted facility was at the time being properly operated;
3. During the period of the emergency Lafarge took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
4. Lafarge submitted notice of the emergency to the Puget Sound Clean Air Agency within two (2) working days of the time when the emissions limitations were exceeded due to the emergency or shorter periods of time specified in an applicable requirement. This notice fulfills the requirement of WAC 173-401-615(3)(b) unless the excess emissions represent a potential threat to human health or safety. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, Lafarge has the burden of proof to establish the occurrence of an emergency. This provision is in addition to any emergency or upset provision contained in any applicable requirement. [WAC 173-401-645, 11/4/93]

T. Unavoidable excess emissions

Excess emissions due to startup or shutdown conditions, scheduled maintenance or upsets that are determined to be unavoidable under the procedures and criteria in WAC 173-400-107 shall be excused and not subject to penalty. For any excess emission that Lafarge wants the Puget Sound Clean Air Agency to consider unavoidable and excusable under WAC 173-400-107, Lafarge shall submit the information required under WAC 173-400-107. [WAC 173-400-107(2), 8/20/93 State/Puget Sound Clean Air Agency only]

U. Need to halt or reduce activity not a defense

It shall not be a defense for Lafarge in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b), 11/4/93]

V. Stratospheric ozone and climate protection

1. Lafarge shall comply with the following standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

- i) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;
 - ii) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;
 - iii) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
2. Lafarge may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SNAP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]
 3. Any certified technician employed by Lafarge shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]
 4. Lafarge shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant when servicing, repairing or disposing of commercial air conditioning, heating, or refrigeration systems. [RCW 70.94.970(2) and (4), 11/12/97 State/Puget Sound Clean Air Agency only]

W. RACT satisfied

Emission standards and other requirements contained in rules or regulatory orders in effect at the time of this permit issuance shall be considered RACT for the purposes of issuing this permit. [WAC 173-401-605(3), 11/4/93; WAC 173-400-040, 9/20/93, 12/23/00 State Only]

X. Risk management programs

In accordance with 40 CFR part 68, if Lafarge has or receives more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, Lafarge shall comply with the requirements of the Chemical Accident Prevention Provisions of 40 CFR Part 68 no later than the following dates:

Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or the date on which a regulated substance is first present above a threshold quantity in a process.

Y. Definitions

Unless otherwise defined in this permit, the terms used in this permit shall have the same meaning ascribed to them in the referenced regulation. [WAC 173-401-200, 10/17/02]

Z. Duty to supplement or correct application

Upon becoming aware that it has failed to submit any relevant facts in a permit application or that it has submitted incorrect information in a permit application, Lafarge shall promptly submit such supplementary facts or corrected information to the Puget Sound Clean Air Agency. [WAC 173-401-500(6), 10/17/02]

AA. Insignificant emission units and activities

1. Insignificant emission units and activities at Lafarge are subject to all applicable requirements set forth in Sections I.A, III and IV. This permit shall not require testing, monitoring, reporting or recordkeeping for insignificant emission units or activities except as required by Puget Sound Clean Air Agency Regulation I, Sections 7.09(b) and 9.20. Compliance with Puget Sound Clean Air Agency Regulation I, Sections 7.09(b) and 9.20 shall be deemed to satisfy the requirements of WAC 173-401-615 and 173-401-630(1).

[WAC 173-401-530(2)(c), 10/17/02]

2. Where this permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, Lafarge may certify continuous compliance if there were no observed, documented, or known instances of noncompliance during the reporting period. Where this permit requires testing, monitoring, recordkeeping and reporting for insignificant emission units or activities, Lafarge may certify continuous compliance when the testing, monitoring, and recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented, or known instances of noncompliance during the reporting period.

[WAC 173-401-530(2)(d), 10/17/02]

3. An emission unit or activity that qualifies as insignificant solely on the basis of WAC 173-401-530(1)(a) shall not exceed the emission thresholds specified in WAC 173-401-530(4) until this permit is modified pursuant to Section VI.E of this permit and WAC 173-401-725.

[WAC 173-401-530(6), 10/17/02]

VI. PERMIT ACTIONS

A. Permit Renewal, Revocation and Expiration

- 1) **Renewal application.** Lafarge shall submit a complete permit renewal application to the Puget Sound Clean Air Agency no later than 12 months prior to the expiration of this permit. Puget Sound Clean Air Agency will send Lafarge a renewal application no later than 18 months prior to the expiration of this permit. Failure of the Puget Sound Clean Air Agency to send Lafarge a renewal application shall not relieve Lafarge from the obligation to file a timely and complete renewal application. [WAC 173-401-710(1), WAC 173-401-500(2), 10/17/02]
- 2) **Expired permits.** Permit expiration terminates Lafarge's right to operate unless a timely and complete renewal application has been submitted consistent with WAC 173-401-710(1) and WAC 173-401-500. All terms and conditions of the permit shall remain in effect after this permit expires if a timely and complete permit application has been submitted. [WAC 173-401-710(3), 10/17/02]
- 3) **Revocation of permits.** Puget Sound Clean Air Agency may revoke a permit only upon the request of Lafarge or for cause. Puget Sound Clean Air Agency shall provide at least thirty days written notice to Lafarge prior to revocation of the permit or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford Lafarge an opportunity to meet with the Puget Sound Clean Air Agency prior to the Puget Sound Clean Air Agency's final decision. A revocation issued under this condition may be issued conditionally with a future effective date and may specify that the revocation will not take effect if Lafarge satisfies the specified conditions before the effective date. Nothing in this subsection shall limit the Puget Sound Clean Air Agency's authority to issue emergency orders. [WAC 173-401-710(4), 10/17/02]

B. Administrative Permit Amendments

- 1) **Definition.** An "administrative permit amendment" is a permit revision that:
 - a) Corrects typographical errors;
 - b) Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at Lafarge;
 - c) Requires more frequent monitoring or reporting by Lafarge;
 - d) Allows for a change in ownership or operational control of a source where the Puget Sound Clean Air Agency determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Puget Sound Clean Air Agency;
 - e) Incorporates into the permit the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of WAC 173-401-700, 173-401-725, and 173-401-800 that would be applicable to the change if it were subject to review as a permit modification, and

compliance requirements substantially equivalent to those contained in WAC 173-401-600 through 173-401-650. [WAC 173-401-720(1), 11/4/93]

- 2) **Administrative permit amendment procedures.** An administrative permit amendment may be made by the Puget Sound Clean Air Agency consistent with the following:
 - a) Puget Sound Clean Air Agency shall take no more than sixty days from receipt of a request for an administrative permit amendment to take final action on such request, and may incorporate such changes without providing notice to the public or affected states provided that it designates any such permit revisions as having been made pursuant to this paragraph.
 - b) Puget Sound Clean Air Agency shall submit a copy of the revised permit to EPA.
 - c) Lafarge may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. [WAC 173-401-720(3), 11/4/93]
- 3) **Permit shield.** Puget Sound Clean Air Agency shall, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in WAC 173-401-640 for administrative permit amendments made pursuant to Part (1)(e) of this condition. [WAC 173-401-720(4), 11/4/93]

C. Changes not Requiring Permit Revisions

- 1) **General.**
 - a) Lafarge is authorized to make the changes described in this section without a permit revision, providing the following conditions are met:
 - i) The proposed changes are not Title I modifications as defined in WAC 173-401-200;
 - ii) The proposed changes do not result in emissions which exceed those allowable under the permit, whether expressed as a rate of emissions, or in total emissions;
 - iii) The proposed changes do not alter permit terms that are necessary to enforce limitations on emissions from units covered by the permit; and
 - iv) Lafarge provides EPA and the Puget Sound Clean Air Agency with written notification at least seven days prior to making the proposed changes except that written notification of a change made in response to an emergency shall be provided as soon as possible after the event.
 - b) Permit attachments. Lafarge and the Puget Sound Clean Air Agency shall attach each notice to their copy of the relevant permit.
- 2) **Section 502 (b)(10) changes.** Pursuant to the conditions in Subsection (1) of this section, Lafarge is authorized to make Section 502(b)(10) changes (as defined in WAC 173-401-200) without a permit revision.
 - a) For each such change, the written notification required under Subsection (1)(a)(iv) of this condition shall include a brief description of the change within the permitted facility,

the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

- b) The permit shield authorized under WAC 173-401-640 shall not apply to any change made pursuant to this paragraph.
- 3) **SIP authorized emissions trading.** Pursuant to the conditions in Subsection (1) of this condition, Lafarge is authorized to trade increases and decreases in emissions in the permitted facility, where the Washington state implementation plan provides for such emissions trades without requiring a permit revision. This provision is available in those cases where the permit does not already provide for such emissions trading.
 - a) Under this Subsection (3), the written notification required under Subsection (1)(a)(iv) of this condition shall include such information as may be required by the provision in the Washington state implementation plan authorizing the emissions trade, including at a minimum, when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which Lafarge will comply using the emissions trading provisions of the Washington state implementation plan, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which Lafarge will comply in the applicable implementation plan and that provide for the emissions trade.
 - b) The permit shield described in WAC 173-401-640 shall not extend to any change made under this paragraph. Compliance with the permit requirements that Lafarge will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.

[WAC 173-401-722, 10/17/02]

D. Off Permit Changes

- 1) Lafarge shall be allowed to make changes not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided that the proposed changes do not weaken the enforceability of existing permit conditions. Any change that is a Title I modification or is a change subject to the acid rain requirements under Title IV of the FCAA must be submitted as a permit revision.
- 2) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.
- 3) Lafarge must provide contemporaneous written notice to the Puget Sound Clean Air Agency and EPA of each such change, except for changes that qualify as insignificant under WAC 173-401-530. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
- 4) The change shall not qualify for the permit shield under WAC 173-401-640.
- 5) Lafarge shall keep a record describing changes made at Lafarge that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

- 6) When making a change under this section, Lafarge shall comply with applicable preconstruction review requirements established pursuant to RCW 70.94.152 and Puget Sound Clean Air Agency Regulation I, Article 6. [WAC 173-401-724, 11/4/93]

E. Permit Modification

- 1) **Definition.** A permit modification is any revision to this permit that cannot be accomplished under provisions for administrative permit amendments under WAC 173-401-720.
- 2) **Procedures.** Minor permit modification procedures.
- a) Criteria.
- i) Minor permit modification procedures shall be used for those permit modifications that:
- a) Do not violate any applicable requirement;
- b) Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- c) Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
- d) Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that Lafarge has assumed to avoid an applicable requirement to which Lafarge would otherwise be subject. Such terms and conditions include:
- (1) A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the FCAA; and
- (2) An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the FCAA;
- e) Are not modifications under any provision of Title I of the FCAA;
- ii) Notwithstanding (a)(i) of this subsection, and Subsection (3) of this section, the Puget Sound Clean Air Agency may allow the use of minor permit modification procedures for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that the use of such minor permit modification procedures is explicitly provided for in the Washington state implementation plan or in applicable requirements promulgated by EPA and in effect on April 7, 1993.
- b) Application. An application requesting the use of minor permit modification procedures shall meet the requirements of WAC 173-401-510 and shall include the following:
- i) A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- ii) Lafarge's suggested draft permit;

- iii) Certification by a responsible official, consistent with WAC 173-401-520, of the truth, accuracy, and completeness of the application and that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
 - iv) Completed forms for the Puget Sound Clean Air Agency to use to notify EPA and affected states as required under WAC 173-401-810 and 173-401-820.
- c) Lafarge's ability to make change. Lafarge may make the change proposed in its minor permit modification application immediately after it files such application provided that those changes requiring the submissions of a notice of construction application have been reviewed and approved by the Puget Sound Clean Air Agency. After Lafarge makes the change allowed by the preceding sentence, and until the Puget Sound Clean Air Agency takes any of the actions specified in WAC 173-401-725(d), Lafarge must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, Lafarge need not comply with the existing permit terms and conditions it seeks to modify. However, if Lafarge fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.
- d) Permit shield. The permit shield under WAC 173-401-640 shall not extend to minor permit modifications.
- 3) **Group processing of minor permit modifications.** Consistent with WAC 173-401-725(3), the Puget Sound Clean Air Agency may process groups of a source's applications for certain modifications eligible for minor permit modification processing.
- 4) **Significant modification procedures.**
- a) Criteria. Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative permit amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing herein shall be construed to preclude Lafarge from making changes consistent with Chapter 173-401 WAC that would render existing permit compliance terms and conditions irrelevant.
 - b) Significant permit modifications shall meet all requirements of Chapter 173-401 WAC, including those for applications, public participation, review by affected states, and review by EPA, as they apply to permit issuance and permit renewal. Puget Sound Clean Air Agency shall complete review on the majority of significant permit modifications within nine months after receipt of a complete application.

[WAC 173-401-725, 11/4/93]]

F. Reopening for Cause

- 1) **Standard provisions.** This permit shall be reopened and revised under any of the following circumstances:

- a) Additional applicable requirements become applicable to Lafarge with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);
 - b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit;
 - c) Puget Sound Clean Air Agency or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d) Puget Sound Clean Air Agency or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2) **Procedures.** Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
 - 3) **Notice.** Reopenings under this section shall not be initiated before a notice of such intent is provided to Lafarge by the Puget Sound Clean Air Agency at least thirty days in advance of the date that the permit is to be reopened, except that the Puget Sound Clean Air Agency may provide a shorter time period in the case of an emergency.

[WAC 173-401-730, 11/4/93]

VII. PERMIT SHIELD

Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements contained in Sections I through VI of this permit that are specifically identified in this permit as of the date of permit issuance. [WAC 173-401-640(1)]

Nothing in this permit shall alter or affect the following:

- (1) The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section;
- (2) The liability of an owner or operator of Lafarge for any violation of applicable requirements prior to or at the time of permit issuance;
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the FCAA;
- (4) The ability of EPA to obtain information from a source pursuant to Section 114 of the FCAA; or
- (5) The ability of Puget Sound Clean Air Agency to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in Chapter 252, Laws of 1993.

[WAC 173-401-640(4), 11/4/93]

VIII. INAPPLICABLE REQUIREMENTS

As of the date of permit issuance, the requirements listed below do not apply to Lafarge, or to the specific emission units specified below for the reasons indicated. The permit shield applies to all requirements so identified. [WAC 173-401-640(2), 11/4/1993]

Citation	Type of Requirement	Basis for Nonapplicability
RCW 70.94.531	Transportation Demand Management	This section requires, within 6 months after King County's adoption of a commute trip reduction plan, employers develop a trip reduction program and submit the program to the Puget Sound Clean Air Agency for review. This section is not an applicable requirement because it applies only to "major employers" that employ 100 or more full-time employees at a single work site who begin their work day between 6:00 a.m. and 9:00 a.m. Lafarge does not employ 100 or more workers; therefore, it is not an applicable requirement. This requirement does not apply to emission units or stationary sources.
WAC 173-400-075 (except asbestos NESHAPS)	Emissions Standards for Sources Emitting Hazardous Air Pollutants	This requirement adopts the national emissions standards for hazardous air pollutants in 40 CFR Part 61 by reference and gives Ecology authority to conduct source tests and access to records to determine compliance. WAC 173-400-075 is not an applicable requirement because none of the subparts of 40 CFR Part 61 apply to any emissions unit at Lafarge.
WAC 173-400-151	Retrofit Requirements for Visibility Protection	This is inapplicable because Ecology has not identified Lafarge as a source causing or contributing to impaired visibility in a Class I area. If Ecology makes such a determination, Puget Sound Clean Air Agency will reopen the permit.
WAC 173-435	Emergency Episode Plans	This chapter is not an applicable requirement until it is triggered by a request from Ecology to prepare a Source Emission Reduction Plan (SERP). Absent a request for a SERP, nothing in this chapter (except WAC 173-435-050(2)) imposes substantive requirements on sources.
WAC 173-434 Solid Waste Incinerator Facilities (State effective date 1/22/04) PENDING –effective at such time as the EPA adopts this version into the SIP.	Emission and operational limits for solid waste incinerator facilities	WAC 173-434 (effective 1/22/04) includes provision to exclude solid waste streams presently approved for fuel substitution by Lafarge from the definition of solid waste under this regulation. Once the EPA approves this new version of WAC 173-434 into the Washington SIP, then this regulation will no longer apply to Lafarge for exempted waste streams. At the point of that SIP approval, all provisions of this permit based on the 10/18/90 version of WAC 173-434 will be superceded and no longer applicable.
WAC 173-435-050(2)	Action Procedures	Subsection (2) is not an applicable requirement because Lafarge's operations do not include open burning. The other subsections are not applicable requirements, because

Citation	Type of Requirement	Basis for Nonapplicability
		they do not impose substantive requirements on facilities.
WAC 173-470	Ambient Air Quality Standards for Particulate Matter	Ambient air quality standards are not "applicable requirements" [See WAC 173-400-200(4); 57 Fed. Reg. 32276 (July 22, 1992)].
WAC 173-474	Ambient Air Quality Standards for Sulfur Oxides	Ambient air quality standards are not "applicable requirements" [See WAC 173-400-200(4); 57 Fed. Reg. 32276 (July 22, 1992)].
WAC 173-475	Ambient Air Quality Standards for Carbon Monoxide, Ozone, and Nitrogen Dioxide	Ambient air quality standards are not "applicable requirements" [See WAC 173-400-200(4); 57 Fed. Reg. 32276 (July 22, 1992)].
WAC 173-480	Ambient Air Quality Standards and Emission Limits for Radionuclides	Ambient air quality standards are not "applicable requirements" [See WAC 173-400-200(4); 57 Fed. Reg. 32276 (July 22, 1992)]. These standards are also not applicable requirements because Lafarge does not emit radionuclides.
WAC 173-481	Ambient Air Quality and Environmental Standards for Fluorides	Ambient air quality standards are not "applicable requirements" [See WAC 173-400-200(4); 57 Fed. Reg. 32276 (July 22, 1992)].
Puget Sound Clean Air Agency Reg. I: Article 5	Registration	This section will not be applicable because Title V permitted sources are not subject to these registration and reporting requirements per RCW 70.94.161(17).
Puget Sound Clean Air Agency Reg. I: 9.09(c)(1) (02/10/94)	5% opacity 1-hour standard	This regulation does not apply because Lafarge has obtained Order of Approval 5183, following Puget Sound Clean Air Agency Reg: 9:04(d)(2) for an alternate opacity standard of 12% opacity.
Puget Sound Clean Air Agency Reg. I: 9.04(e) (04/9/98)	Venturi Scrubber	This section does not apply because Lafarge does not operate a Venturi scrubber and Lafarge will apply for a permit modification before installation.
Puget Sound Clean Air Agency Reg. I: 12.02(b) (08/10/89)	Wet Control Equipment	This section is not an applicable requirement because Lafarge does not use wet control equipment, and Lafarge will apply for a permit modification before installation.
Puget Sound Clean Air Agency Reg. I: 12.03(c) (08/10/89)	Pressure Loss Through Scrubbers	This section is not applicable because Lafarge does not use scrubbers.

Citation	Type of Requirement	Basis for Nonapplicability
Puget Sound Clean Air Agency Reg. I: 12.03(d) (08/10/89)	Scrubber Liquid Supply Rate	This section is not applicable because Lafarge does not use scrubbers.
Puget Sound Clean Air Agency Reg. I: 12.04(b) (08/10/89)	Recordkeeping for Scrubber Operations	This section is not applicable because Lafarge does not use scrubbers.
Puget Sound Clean Air Agency Reg. II: Articles 1, 2 & 3	Gasoline Marketing & VOC Standards	These sections are not applicable because Lafarge does not have equipment that is governed by this regulation.
Puget Sound Clean Air Agency Reg. III: Articles 3	Chromium Standards	This section is inapplicable because Lafarge does not have any of the listed equipment and must obtain approval before installing this type of equipment.

IX. INSIGNIFICANT EMISSION UNITS

A. Insignificant Emission Units and Activities

As of the date of permit issuance, the emission units listed below are defined as insignificant for the reasons indicated.

Unit	Basis for IEU Designation
Lubricating oil storage tanks	WAC 173-401-532 (3)
Vehicle maintenance	WAC 173-401-532 (7)
Internal combustion engines for propelling or powering a vehicle	WAC 173-401-532(10)
Welding equipment	WAC 173-401-532(12)
Cleaning and sweeping of streets and paved surfaces	WAC 173-401-532(35)
Roads (sweep and water for dust control)	WAC 173-401-532(35)
Steam cleaner	WAC 173-401-532(39)
Kerosene, grease, and oil drums	WAC 173-401-532(42)
Truck wash	WAC 173-401-532(45)
Window air conditioners	WAC 173-401-532(46)
Bathroom vents	WAC 173-401-532(48)
Fuel and exhaust emissions from vehicles in parking lots	WAC 173-401-532(54)
Staff vehicles	WAC 173-401-532(54)
Air compressor (electric)	WAC 173-401-532(88)
Diesel Fuel Tank (kiln drive standby) 185 gal	WAC 173-401-533(2)(a)
Underground Diesel Fuel Tank 2000 gal	WAC-173-401-533(2)(c)
Lignoute Tank	WAC-173-401-533(2)(c)
Finish Grinding Aid Tank	WAC-173-401-533(2)(c)
Space Heaters < 5 MMBtu/hr	WAC 173-401-533(2)(r)
Underground Gasoline tank 1000 gal	WAC 173-401-533(2)(t)
Safety-Kleen station	WAC 173-401-533(2)(z)
Calibration gases (for equipment)	WAC 173-401-533(3)(c)

X. APPENDIXES

A. Reference Methods (by reference only, not attached)

- (1) EPA Method 5 [40 CFR 60, Appendix A, July 1, 2001]
- (2) EPA Method 6C [40 CFR 60, Appendix A, July 1, 2001]
- (3) EPA Method 9 [40 CFR 60, Appendix A, July 1, 2001]
- (4) EPA Method 26/26A [40 CFR 60, Appendix A, July 1, 2001]

B. Non-EPA Test Methods

- (1) Puget Sound Clean Air Agency Method 5 as approved by Puget Sound Clean Air Agency Board Resolution 540 dated August 11, 1983
- (2) Ecology Method 9A

C. Reference Continuous Emission Monitoring Performance Specification (by reference only, not attached)

- (1) EPA Performance Specification 1 (Opacity Monitoring) [40 CFR 60, Appendix B, July 1, 1997]
- (2) EPA Performance Specification 2 (SO₂ Monitoring) [40 CFR 60, Appendix B, July 1, 1997]

D. EPA Quality Assurance Procedures

Main Stack and Clinker Cooler CEMS Operation and Reporting

1. Lafarge shall not operate the main stack and clinker cooler unless the emissions are continuously monitored in accordance with the requirements of Article 12. [Puget Sound Clean Air Agency Regulation I: 12.02(a), 4/9/1998].
2. Data Recovery. Lafarge shall recover valid hourly monitoring data for at least 95% of the hours that main stack and clinker cooler are operated during each calendar month except for:
 - (a) Periods of monitoring system downtime, provided that the owner or operator demonstrates to the Control Officer that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner; and
 - (b) Periods authorized under Section 3.03 or Section 6.07 of Regulation I. [Puget Sound Clean Air Agency Regulation I: 12.03(b), 4/9/1998].
3. Quality Assurance. Lafarge shall install a continuous emission monitoring system that meets the performance specification in 40 CFR Part 60, Appendix B in effect at

- the time of its installation, and shall operate this monitoring system in accordance with the quality assurance procedures in Appendix F of 40 CFR Part 60 in effect July 1, 1997, and the U.S. Environmental Protection Agency's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA 340/1-86-010) (see Appendix B(1)). [Puget Sound Clean Air Agency Regulation I: 12.03(c), 4/9/1998].
4. Data Recording. Monitoring data commencing on the clock hour and containing at least 45 minutes of monitoring data shall be reduced to 1-hour averages. Monitoring data for opacity shall also be reduced to 6-minute averages. All monitoring data shall be included in these averages except for data collected during calibration drift tests and cylinder gas audits, and for data collected subsequent to a failed quality assurance test or audit. [Puget Sound Clean Air Agency Regulation I: 12.03(d), 4/9/1998].
 5. Data Retention: Lafarge shall retain all monitoring data averages for at least 2 years, including copies of all reports submitted to the Agency and records of all repairs, adjustments, and maintenance performed on the monitoring system for main stack and clinker cooler. All such data collected after October 1, 1998 shall be retained for at least 5 years. [Puget Sound Clean Air Agency Regulation I: 12.03(e), 4/9/1998].
 6. Data Reporting. Lafarge shall submit a monthly report to the Agency within 30 days after the end of the month in which the data were recorded. This report shall include:
 - (a) The date, time period, magnitude (in the units of the standard) and cause of each emission that exceeded an applicable emission standard;
 - (b) The date and time of all actions taken to correct the problem, including any actions taken to minimize the emissions during periods of excess emissions and any actions taken to prevent their recurrence;
 - (c) The number of hours that the main stack and clinker cooler operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;
 - (d) The date, time period, and cause of each failure to meet the data recovery requirements of Section 12.03(b) and any actions taken to ensure adequate collection of such data;
 - (e) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90% of the hours that the main stack and clinker cooler operated each day;
 - (f) The results of all periodic quality assurance checks and preventive maintenance audits (EPA 340/1-86-010, Subsection 2.2 below) conducted during the month; and
 - (g) A certification of truth, accuracy, and completeness signed by an authorized representative of Lafarge.

[Puget Sound Clean Air Agency Regulation I: 12.03(f), 4/9/1998].

E. Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems EPA 340/1-86-01

F. WAC 173-434 Solid Waste Incinerator Facilities Requirements (reference EU 1.66)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II & Appendix F)	Emission Standard Period	Reference Test Method
<p>WAC 173-434 Solid Waste Incineration Facilities</p> <p>These requirements apply as a result of waste fuels burned (see Conditions EU 1.10 and EU 1.12 through 1.15) and the SIP approved version of WAC 173-434 (10/18/90). WAC 173-434 was updated (effective 1/22/04) and will exempt certain waste fuels from the applicability of this regulation. Once the 1/22/04 version of WAC 173-434 is incorporated into the SIP, Condition EU 1.66 this permit (along with the associated monitoring, recordkeeping, and reporting provisions of this regulation) will be superseded and inapplicable for this permit, based on the presently approved operations at Lafarge. These requirements apply during periods when Lafarge is feeding solid waste fuels to the kiln.</p>						
EU 1.66(a)	WAC 173-434-130(1)(b) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall not exceed emission concentrations of particulate matter from the kiln greater than 0.030 gr/dscf (at 7% oxygen) since the kiln has a maximum capability to burn solid waste at a rate <250 tons/day	II.A.1(a) General Visual Opacity Monitoring II.A.2(d) Alternate Opacity Monitoring	(3) 1-hour runs	Puget Sound Clean Air Agency Method 5 (See Section X)
EU 1.66(b)	WAC 173-434-130(3) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall not exceed emission concentrations of sulfur dioxide greater than 50 ppmv (dry) (at 7% oxygen) unless a higher limit is approved that is based on at least 80% emission control.	II.A.2(b) SO ₂ CEMS	1-hour average	EPA Method 6C (40 CFR 60, Appendix A, July 1, 2001) (40 CFR 60, Appendix B, & Appendix F, 7/1/1997)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II & Appendix F)	Emission Standard Period	Reference Test Method
EU 1.66(c)	WAC 173-434-130(4)(a) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall not exceed visible emissions from the kiln greater than an average of 5 percent opacity for more than six consecutive minutes in any sixty minute period.	II.A.1(a) General Visual Opacity Monitoring	6-minute period	EPA Performance Specification 1 (40 CFR 60, Appendix B July 1, 1997) Ecology Method 9A 7/12/1990 (See Section X)
EU 1.66(d)	WAC 173-434-130(4)(b) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall not exceed visible emissions from the kiln, as measured by a transmissometer, greater than an average of 10 percent opacity for more than six consecutive minutes in any sixty minute period.	II.A.2(a) Opacity CEMS	6-minute period	EPA Method 9 (40 CFR 60, Appendix A, July 1, 2001) EPA Performance Specification 1 (40 CFR 60, Appendix B, July 1, 1997)
EU 1.66(e)	WAC 173-434-130(4)(c) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall not exceed visible emissions from emission units (other than the kiln) greater than an average of 0 percent opacity for more than six consecutive minutes in any sixty minute period.	II.A.1(a) General Visual Opacity Monitoring	6-minute period	EPA Method 9 (40 CFR 60, Appendix A, July 1, 2001)

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II & Appendix F)	Emission Standard Period	Reference Test Method
EU 1.66(f)	WAC 173-434-130(5) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall take reasonable precautions to prevent fugitive emissions, which includes paving of all normally traveled roadways within the plant boundary and enclosing or hooding material transfer points.	No monitoring required.	N/A	
EU 1.66(g)	WAC 173-434-160(1) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	When ever solid waste is being burned, Lafarge shall operate the kiln such that the final combustion zone temperature shall not be below 1800°F for a 15 minute average nor below 1600°F for any reading.	Additional Monitoring, Recordkeeping & Reporting for Solid Waste Incinerator Facilities (Appendix F)	15-minute average and instantaneous	
EU 1.66(h)	WAC 173-434-160(2) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall maintain a combustion gas residence time of 1.0 seconds in the kiln.	Additional Monitoring, Recordkeeping & Reporting for Solid Waste Incinerator Facilities (Appendix F)	N/A	

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II & Appendix F)	Emission Standard Period	Reference Test Method
EU 1.66(i)	WAC 173-434-160(3) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall operate the kiln such that combustion gases leaving the kiln have at least 3% oxygen measured on a wet basis.	Additional Monitoring, Recordkeeping & Reporting for Solid Waste Incinerator Facilities (Appendix F)	24-hour average	
EU 1.66(j)	WAC 173-434-160(4) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall minimize odor and fugitive emissions from the tipping area.	II.A.1(c) Facility-Wide Inspections II.A.1(d) General Fugitive Dust		
EU 1.66(k)	WAC 173-434-160(5) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall control pressurized combustion air distribution.	Additional Monitoring, Recordkeeping & Reporting for Solid Waste Incinerator Facilities (Appendix F)		

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II & Appendix F)	Emission Standard Period	Reference Test Method
EU 1.66(l)	WAC 173-434-160(6) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall operate the kiln such that the inlet temperature to the electrostatic precipitator shall not exceed 350°F.	Additional Monitoring, Recordkeeping & Reporting for Solid Waste Incinerator Facilities (Appendix F)	24-hour average	
EU 1.66(m)	WAC 173-434-160(7) <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall operate the kiln consistent with good air pollution control practice.	II.A(1) Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements (Facility-wide) II.B. Operation and Maintenance (O&M) Plan Requirements	N/A	

Reqmt. No.	Enforceable Requirement	Adoption or Effective Date	Requirement Paraphrase (Information Only)	Monitoring, Maintenance & Recordkeeping Method (See Section II & Appendix F)	Emission Standard Period	Reference Test Method
EU 1.66(n)	WAC 173-434-090 <i>This requirement shall be superseded and become inapplicable by the 1/22/04 version of WAC 173-434 once it is adopted into the SIP</i>	10/18/90	Lafarge shall develop a plan for operation and maintenance of the kiln to maintain compliance with the requirements of WAC 173-434. Lafarge shall update the plan as warranted, and shall submit the plan for Puget Sound Clean Air Agency approval every 24 months, commencing August 1, 2004. Lafarge may elect to integrate the WAC 173-434 O&M Plan into the general O&M Plan required by Condition I.A.14. If so the general O&M Plan shall specifically identify those provisions required by this condition.	II.A. Minimum Monitoring, Maintenance Reporting & Recordkeeping Requirements	N/A	

N/A = Not Applicable. A specific reference test method and/or emission standard period is specified in the requirement. A test method is neither needed nor appropriate.

Additional Monitoring, Recordkeeping, & Reporting for Solid Waste Incineration Facilities

Monitoring & Recordkeeping

Lafarge shall continuously monitor and record the following operational parameters during any 24 hour period (commencing 12 p.m.) in which the kiln combusts solid waste:

- Final combustion zone temperature. The average temperature shall be recorded for each 15 minute block interval. Records shall note any measurement below 1600° F and any 15 minute block in which the combustion zone temperature averages less than 1800° F.
- Particulate control device temperature (electrostatic precipitator inlet). The average temperature shall be recorded for each 24 hour period commencing at 12 p.m. Records shall note any 24 hour block during which the average temperature exceeds 350° F.
- Oxygen (for excess air, kiln outlet). The average oxygen concentration shall be recorded for each 24 hour period commencing at 12 p.m. Records shall note any 24 hour block during which the average oxygen concentration measured on a wet basis is less than 3 percent.
- Carbon monoxide. The average carbon monoxide shall be recorded for each 24 hour period commencing at 12 p.m.
- Combustion air distribution and residence time. The average free lime (CaO) content in clinker shall be recorded for each 24-hour period commencing at 12 p.m., as an indication of combustion air and residence time control.

The continuous monitoring systems described in this condition shall meet the data recovery and data recording requirements set forth in Condition II.A.2(b), except that the electrostatic precipitator inlet temperature CMS shall meet the requirements of Conditions II.A.2(i) and II.A.2(k).

[WAC 173-434-170(1), (10/18/90), WAC 173-434-170(2), (10/18/90)]

Monthly Monitoring Report

Lafarge shall file with the Puget Sound Clean Air Agency a monthly WAC 173-434 monitoring report within 15 days of end of each calendar month which will include the following:

- Average daily maximum and daily maximum concentration of opacity (percent), sulfur dioxide (ppm) and carbon monoxide (ppm) and the daily amount of solid waste burned.
- Date, time, and magnitude of any periods during which the standards identified in the requirements for Condition EU 1.66 (as shown in Appendix F of this permit) were exceeded and what corrective action was or will be taken.
- Any period(s) during which the kiln continuous monitoring systems for opacity, combustion zone temperature, particulate control device temperature and air flow, sulfur dioxide, oxygen and/or carbon monoxide do not meet the applicable data recovery requirements of Section II.A.2 of this permit .

[WAC 173-434-170(2), 10/18/90]

Change in Operation Reports for Solid Waste Incinerator Facilities

In the event a startup, shutdown, breakdown, or upset condition occurs that could result in a violation of one or more of Conditions EU 1.66 (as shown in Appendix F of this permit) or a violation of an ambient air quality standard, Lafarge shall take the following actions as applicable:

- For planned conditions, such as startups and shutdowns, that Lafarge expects to cause a violation, the condition shall be reported to the Puget Sound Clean Air Agency not less than 24-hours in advance of its occurrence.
- For unplanned conditions, such as a breakdown or upset, the condition shall be reported to the Puget Sound Clean Air Agency as soon as possible, but no later than the end of the next business day.

[WAC 173-434-190, 10/18/90]

Inapplicable Requirements

As of the date of permit issuance, the requirements listed below do not apply to Lafarge, or to the specific emission units specified below for the reasons indicated. The permit shield applies to all requirements so identified. These inapplicable requirements are solely associated with WAC 173-434 (10/18/90) and are in addition to inapplicable requirements identified in Section VIII of the permit. [WAC 173-401-640(2), 11/4/1993]

Citation	Type of Requirement	Basis for Nonapplicability
WAC 173-434-130(1)(a) (10/18/90)	Particulate emission limit for large incinerators	This subsection is not applicable because Lafarge’s kiln is not capable of burning 250 tons per day of solid waste.
WAC 173-434-130(2) (10/18/90)	50 ppm HCl limit for incinerators	This subsection does not apply because WAC 173-434-100(2) states that “Whenever more than one regulation applies to the control of air contaminants from an incinerator facility the more stringent regulation, control or emission limit shall govern.” Lafarge has elected to be regulated as an area source under 40 CFR Part 63, Subpart LLL. To maintain this status Lafarge must limit its HCl emissions to approximately 4.68 ppm of HCl (at 7% O ₂). The operational limits needed to maintain area source status are far more stringent than the 50 ppm HCl limit in WAC 173-434-130(2).