UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA, Plaintiff, and the STATE of ALABAMA, the STATE of ILLINOIS, the STATE of IOWA. the STATE of KANSAS, the STATE of MICHIGAN, the STATE of MISSOURI, the STATE of NEW YORK, the STATE of OHIO, the COMMONWEALTH of PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, the STATE of SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL. the WASHINGTON STATE DEPARTMENT OF ECOLOGY, the OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY, and the PUGET SOUND CLEAN AIR AGENCY, Plaintiff-Intervenors, Civil Action No. 3:10-cv-44-JPG V. LAFARGE NORTH AMERICA, INC., LAFARGE MIDWEST, INC., and LAFARGE BUILDING MATERIALS, INC., Defendants.

AMENDMENT TO CONSENT DECREE

WHEREAS, on January 21, 2010, Plaintiff, the United States of America ("United States"), on behalf of the United States Environmental Protection Agency ("U.S. EPA") filed a Complaint in this action against Defendants, Lafarge North America Inc., ("Lafarge") and its wholly owned subsidiaries Lafarge Midwest, Inc. ("Lafarge Midwest") and Lafarge Building Materials Inc. ("Lafarge Materials") (collectively "Lafarge Companies") (Doc. 3);

WHEREAS, the State of Alabama, the State of Illinois, the State of Iowa, the State of Kansas, the State of Michigan, the State of Missouri, the State of New York, the State of Ohio, the Commonwealth of Pennsylvania Department of Environmental Protection, the South Carolina Department of Health and Environmental Control, the Washington State Department of Ecology, the Oklahoma Department of Environmental Quality, and the Puget Sound Clean Air Agency (collectively, "State Plaintiffs") filed a Complaint in Intervention on March 3, 2010 (Doc. 39);

WHEREAS, the claims in the Complaint and in the Complaint in Intervention were resolved by a Consent Decree entered by the Court on March 18, 2010 (Doc. 45);

WHEREAS, Paragraph 158 of the Consent Decree provides that it may be modified by a subsequent written agreement signed by the Affected State, the United States, and the Lafarge Companies unless the modification constitutes a material change, in which case the modification is effective only upon approval by the Court;

WHEREAS, this Amendment to Consent Decree ("Amendment") relates to the Alpena Cement Plant located in Alpena, Michigan ("Alpena Facility") and the Ravena Cement Plant located in Ravena, New York ("Ravena Facility") which, for purposes of the Consent Decree, are within the jurisdictions of the State of Michigan and State of New York ("the States"),

respectively, making those States "Affected States" within the meaning of Paragraph 7.c of the Consent Decree;

WHEREAS, the United States, the Affected States and the Lafarge Companies ("the Parties") have agreed to amend the Consent Decree to provide the Lafarge Companies the option of installing either one Wet FGD for each of the two Kiln Group 6 ("KG6") Kiln's (Kilns 22 and 23) as the Consent Decree currently provides, or installing one Wet FGD for both KG6 Kiln's combined by January 1, 2014 at the Alpena Facility, thereby advancing the schedule by which Wet FGD controls are to be placed on the second kiln in KG6;

WHEREAS, the Parties have further agreed that Lafarge shall develop and submit for review by EPA and the Affected States a malfunction abatement plan for each Wet FGD at the Alpena Facility and the Ravena Facility to minimize Malfunctions of the Wet FGDs and to minimize excess emissions of sulfur dioxide in the event of a Malfunction;

WHEREAS, the modifications set forth in this Amendment to Consent Decree involve the Alpena Facility, which is identified in Paragraph 7.w(1) of the Consent Decree, and the Ravena Facility, which is identified in Paragraph 7.w(2) of the Consent Decree; and

WHEREAS, the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice and each undersigned representative of the Lafarge Companies and the States certifies that he or she is fully authorized to enter into the terms and conditions of this Amendment and to execute and legally bind the Party he or she represents to this document.

NOW, THEREFORE, IT IS HEREBY AGREED BY THE PARTIES as follows:

1. The Consent Decree, as modified, shall remain in full force and effect in accordance with its terms, except that Paragraphs 7.j, 45, 51 and 78 of the Consent Decree and paragraphs 12 and 22 of the Appendix are amended and restate as follows:

CONSENT DECREE REVISIONS

- 7. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated by the U.S. EPA pursuant to the Act shall have the meanings assigned to them in the Act or such regulations, unless otherwise provided in this Decree. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply.
 - j. "Continuously Operate" or "Continuous Operation" shall mean that when a Control Technology is used at a Kiln, except during a Malfunction of the Control Technology, it shall be operated at all times of Kiln Operation, consistent with the technological limitations, manufacturers' specification, and good engineering and maintenance practices for such Control Technology and the Kiln. "Continuous Operation" shall also mean that, at all times of Kiln Operation and during periods of any Malfunction of any Wet FGD required under Paragraphs 51 and 56 of this Consent Decree, Lafarge shall operate each Wet FGD in compliance with a malfunction abatement plan that is approved by EPA and the Affected State pursuant to Section XI (Review and Approval of Submittals) and that contains the following:
 - A comprehensive preventive maintenance program, including a
 description of the items or conditions that will be inspected, the
 frequency of these inspections or repairs, and an identification of the

- types and quantities of the replacement parts which will be maintained in inventory for quick replacement;
- (2) An identification of the source and the operating variables of the Wet FGD that will be monitored in order to detect a Malfunction, the normal operating range of these variables, and a description of the monitoring or surveillance procedures and of the method of informing operating personnel of any Malfunction, including alarm systems, lights and/or other indicators; and
- (3) A description of the corrective procedures that will be taken in the event of a Malfunction in order to achieve compliance with any Emission Limit as expeditiously as practicable and procedures to be implemented to minimize emissions, to the extent practicable during the period of Malfunction, including but not limited to the operation of a redundant pump to ensure operation of the scrubber in the event of a pump failure.

B. NO_x Continuous Emission Monitoring Systems

45. At each Kiln identified in Paragraph 7.z of this Decree (except for Joppa Kiln 3), the Lafarge Companies shall install and make operational within 12 months of the Effective Date a NO_x continuous emissions monitoring system (CEMS) at each stack which collects emissions from such Kiln (or Kilns, in the case of Alpena Kiln Group 6 (KG6) or Ravena) in accordance with the requirements of 40 C.F.R. Part 60.

* * *

51. Control Technology Retrofit Option.

a. Subject to Section VII (Temporary Cessation of Kiln Operation), the Lafarge Companies shall have installed and Commenced Continuous Operation of DAA or Wet FGD technology in the table specified below on individual Kilns in the order selected by the Lafarge Companies within Kiln Group ("KG") 5 and on the Kilns within KG6 at the Alpena Facility by the dates specified below:

| Kiln | Control Technology | Date of Installation and Commencement of Continuous Operation | 30-Day Rolling Average Emission Limits | Demonstration Phase Facility-Wide 12-Month Rolling Average Emission Limit (lbs. SO ₂ /Ton of clinker) |
|--------------------------------|---------------------------------|---|--|--|
| 1 st Kiln in KG5 | DAA | 10/1/2011 | See Appendix | N 100 N 100 N 100 N |
| 2 nd Kiln in KG5 | DAA | 11/1/2011 | See Appendix | * |
| 3 rd Kiln in KG5 | DAA | 12/1/2011 | See Appendix | 3.68 |
| l st Kiln in KG6 | Wet FGD | 1/1/2014 | See Appendix | |
| 2 nd Kiln in KG6 | Wet FGD | 3/1/2014 | See Appendix | |
| Option for KG6 Kilns | A single Wet FGD for both Kilns | 1/1/2014 | See Appendix | |

- b. Upon installation of the SO₂ Control Technology, the Lafarge Companies shall
 Continuously Operate the SO₂ Control Technology during all times of Kiln
 Operation, except during periods of SO₂ Control Technology Malfunction.
- c. Lafarge shall design the Wet FGD or Wet FGDs to be installed at Alpena Kilns 22 and 23 (KG6) to achieve a removal efficiency for SO₂ of no less than 90%.

- d. If the Lafarge Companies elect not to Retire and Replace any Alpena Kiln in accordance with Section VIII (Election to Retire and Replace Kilns), then:
 - i. Within 12 months after the conclusion of the Optimization Phase as it applies to Kilns 19, 20, and 21 (KG5) identified in Paragraphs 51 and 7.z(1), the Lafarge Companies shall achieve and maintain compliance with the Demonstration Phase Facility-Wide 12-Month Rolling Average Emission Limit for SO₂ of 3.68 lbs./Ton of clinker at Kilns 19, 20, and 21 (KG5), or, alternatively, at those Kilns the Lafarge Companies have elected not to Retire and Replace;
 - ii. Within 12 months after the conclusion of the Optimization Phase as it applies to Kilns 22 and 23 (KG6) identified in Paragraphs 51 and 7.z(1), the Lafarge Companies shall achieve and maintain compliance with the Demonstration Phase Facility-Wide 12-Month Rolling Average Emission Limit for SO₂ of 3.68 lbs./Ton of clinker at Kilns 19, 20, 21, 22, and 23 (KG5 and KG6), or, alternatively, at those Kilns the Lafarge Companies have elected not to Retire and Replace.
- e. The Lafarge Companies shall comply with the Appendix (Control Technology

 Demonstration Requirements) in setting a 30-Day Rolling Average Emission Limit

 for SO₂ applicable to each Alpena Kiln that the Lafarge Companies have not

 otherwise elected to Retire and/or Replace pursuant to Section VIII (Election to

 Retire and Replace Kilns). Within 30 Days after the establishment of a 30-Day

 Rolling Average Emission Limit for SO₂ under the Appendix at any Alpena Kiln that

 the Lafarge Companies have not otherwise elected to Retire or Replace, the Lafarge

Companies achieve and maintain compliance with the 30-Day Rolling Average Emission Limit for SO₂ at the respective Kiln.

B. SO₂ Continuous Emission Monitoring Systems

78. At each Kiln identified in Paragraph 7.z (except for Joppa Kiln 3) of this Decree, the Lafarge Companies shall install and make operational within 12 months of the Effective Date a SO₂ continuous emissions monitoring system (CEMS) at each stack which collects emissions from such Kiln (or Kilns, in the case of Alpena Kiln Group 6 (KG6) or Ravena) in accordance with the requirements of 40 C.F.R. Part 60.

APPENDIX REVISIONS

- "12. Within 30 Days following the optimization period for each Control Technology at each Affected Kiln (or Affected Kilns, in the case of Alpena Kiln Group 6 (KG6) or Ravena) subject to the requirements of this Appendix, the Lafarge Companies shall provide to U.S. EPA and the Affected State pursuant to Section XI (Review and Approval of Submittals) an Optimization Report demonstrating conformance with the optimization protocol for the Control Technology and establishing the operating parameters for the Control Technology determined under the optimization protocol. The Lafarge Companies shall also include in the report a discussion of any problems encountered with the operation of the Control Technology and the impact, if any, the Control Technology may have had on changes in the emissions from the Kiln. The provisions of Section XI (Review and Approval of Submittals) shall apply to U.S.EPA's and the Affected State's review of the Optimization Report, except that U.S. EPA and the Affected State shall review and comment on the Optimization Report within 45 Days of receipt of the Optimization Report and the Lafarge Companies shall respond to any comments received within 30 Days of their receipt of U.S. EPA's and the Affected State's comments. The Lafarge Companies' submittal of and U.S. EPA's and the Affected State's review of the Optimization Report shall not toll the Lafarge Companies' obligation to fulfill other requirements of this Appendix.
- 22. The Final Demonstration Report for an Affected Kiln (or Affected Kilns, in the case of Alpena Kiln Group 6 (KG6) or Ravena), shall be subject to Section XI (Review and

Approval of Submittals) of the Consent Decree and the Dispute Resolution provisions of Section XV of the Consent Decree."

2. The "Effective Date" of this Amendment to Consent Decree shall be the date upon which this Amendment is entered by the Court or a motion to enter the Amendment to Consent Decree is granted, whichever occurs first.

Dated and entered this 28 M Day of April, 2011

UNITED STATES DISTRICT JUDGE
Southern District of Illinois

FOR PLAINTIFF UNITED STATES OF AMERICA:

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Office of Enforcement and Compliance Assurance United States Environmental Protection Agency To: 2026166584 From: (3123538937) 12/27/10 10:30 RM Page 2 of 2

Through their undersigned representatives, the Parties agree and consent to this Amendment to Consent Decree in *United States of America*, et al. v. Lafarge North America, Inc., et al.

Date: 12-22-10

Date: 12/14/10

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

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