IN RE: * BEFORE THE MARYLAND BOLCINE (US) INC. * DEPARTMENT OF THE * ENVIRONMENT * * * * * * * * * * * *

SETTLEMENT AGREEMENT

This Settlement Agreement ("Agreement") is entered into between the State of Maryland Department of the Environment ("Department"), and Holcim (US) Inc. ("Holcim") with regard to certain alleged violations of Maryland laws and regulations concerning emissions into the air and ambient air quality in the State of Maryland ("State"), as asserted by the Department against Holcim.

WHEREAS, the Department enters into the Agreement pursuant to the powers and responsibilities vested in the Secretary of the Department by the Environment Article of the Annotated Code of Maryland, Title 2 and delegated to the Director of the Air and Radiation Administration. The Department's authority is set forth in Title 2 of the Environment Article, Annotated Code of Maryland, and in Title 26, Chapter 11 of the Code of Maryland Regulations ("COMAR");

WHEREAS, Holcim owns and operates a Portland cement plant which manufactures clinker located at 1260 Security Road in Hagerstown, Maryland (the "Facility");

WHEREAS, on or about May 1, 2018, the Department issued to Holcim a Part 70 Operating Permit No. 24-043-0008 ("Part 70 Permit") governing emissions to the ambient air atmosphere from the operation of the Facility;

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WHEREAS, on or about April 11, 2014, the Department issued a permit to construct #043-0008-6-00495 ("Permit to Construct") which was updated on April 18, 2016;

WHEREAS, Holcim is subject to COMAR pertaining to air quality control, the National Emission Standards for Hazardous Air Pollutants ("NESHAP") for the Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL), and the provisions of its Part 70 Permit;

WHEREAS, the Sulfur Dioxide (SO2) limit included in Holcim's Part 70 Permit and Permit to Construct is 1.6 lb/ton of clinker for a 30-day rolling average;

WHEREAS, the Total Hydrocarbon (THC) limit included in Holcim's Permit and Table 1 of 40 C.F.R. §63.1343(b)(1) is 24 parts per m illion by volume dry("ppmvd"), corrected to 7% oxygen for a 30-day rolling average;

WHEREAS, the NESHAP for the Portland Cement Manufacturing facility (40 CFR Part 63, Subpart LLL) includes certain requirements in Section 63.1349 (Performance Testing Requirements) as follows: "To determine continuous compliance with the THC operating limit, you must record the THC Continuous Emission Monitor System (CEMS) output data for all periods when the process is operating and the THC CEMS is not out-of-control." 40 C.F.R. 63.1349(b)(7)(xi). 40 C.F.R. 63.1349(b)(8)(viii) provides a similar requirement for SO2, requiring an operator "[t]o determine continuous compliance with the SO2 operating limit, you must record the SO2 CEMS output data for all periods when the process is operating and the SO2 CEMS is not out-of-control"; WHEREAS, pursuant to its Part 70 Permit and 40 C.F.R Part 63, Subpart LLL, Holcim's mercury emissions are limited to 55-pounds per million tons (lb/MM tons) of clinker for a 30-day rolling average;

WHEREAS, the Department issued a Notice of Violation ("NOV") on May 30, 2018 arising out of Holcim's Q1 2018 CEM report which showed that from February 16-23, 2018, Holcim exceeded their 30-day rolling average emissions limit for mercury from the cement kiln;

WHEREAS, the mercury exceedance recorded in the May 30, 2018 NOV is a violation of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said exceedance, Holcim violated COMAR 26.11.15.02(C), which states, "A person shall not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, the Department issued an NOV on November 13, 2018 arising out of Holcim's Q3 2018 CEM Report which showed that from August 2-6, 2018, Holcim exceeded its 30-day rolling average emissions limit for mercury from the cement kiln;

WHEREAS, the mercury exceedance recorded in the November 13, 2018 NOV is a violation of 40 C.F.R. Part 63, Subpart LLL, and, as a result of said exceedance, Holcim violated. COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, the Department issued an NOV on June 5, 2019 for violations contained in Holcim's Q1 2019 CEM Report which showed that from March 23-25, 2019 and March 27-29,

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2019, Holcim exceeded their 30-day rolling average SO₂ limit. Holcim also self-reported an exceedance of its 30-day rolling average THC limit from February 15-24, 2019, which was also included as part of the Department's June 5, 2019 NOV;

WHEREAS, the SO₂ limit is included in both Holcim's Part 70 Permit and Permit to Construct and the THC limit is included in Holicm's Part 70 Permit and Table 1 of 40 C.F.R. §63.1343(b)(1). Holcim's exceedance of these limits is a violation of COMAR 26.11.02.05;

WHEREAS, the Department issued an NOV on August 12, 2019 for violations contained in Holcim's Q2 2019 CEM Report which showed downtime for the THC CEMS and the SO₂ CEMS of 18.3% and 16.9% respectively;

WHEREAS, the CEMS downtimes are violations of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said exceedance, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, the Department issued an NOV on October 8, 2019 for violations of their Part 70 Permit which were the result of ten (10) deviations in their first half 2019 Six-Month Monitoring Report ("SIXMON");

WHEREAS, deviations from Holcim's Part 70 Permit are violations of COMAR 26.11.02.05;

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WHEREAS, the Department issued an NOV on November 25, 2019, which was subsequently amended by an NOV dated February 27, 2020¹, arising out of Holcim's Q3 2019 CEM Report which showed that on August 15-21, August 23-26, August 29-31 of 2019, and September 15, 2019, Holcim exceeded their 30-day rolling average emissions limit for mercury from the cement kiln;

WHEREAS, the mercury exceedances recorded in the November 25, 2019 NOV (revised on February 27, 2020) is a violation of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said exceedance, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R 63";

WHEREAS, the Department issued an NOV on February 27, 2020 arising out of Holcim's Q4 2019 CEM report which showed that on December 21 & 22, 2019, Holcim exceeded its 30-day rolling average emissions limit for mercury from the cement kiln;

WHEREAS, the mercury emission limit contained in 40 C.F.R. Part 63, Subpart LLL, is a violation of COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated, a MACT source which results,

¹The cover letter for the Q4 2019 CEM report stated that after Holcim had conducted an audit of their Data Archiving System (DAS), Holcim found it necessary to reprogram some elements of the DAS, and to update historical data. Holcim stated that after these DAS corrections were performed, Holcim had the following findings: Holcim found two deviations of their mercury emissions standard (on September 15, 2019 and December 21-22, 2019); and, mercury exceedances that were previously reported in the Q3 2019 CEM report on August 15-23, 2019 and on August 29-31, 2019 had changed dates. After the historical data correction was performed, these exceedances were shown to have occurred on August 15-21, August 23-26, and August 29-31 of 2019. As a result, the Department issued an NOV on February 27, 2020 which was a revision of the November 25, 2019 NOV and not a new and separate NOV. The December 21-22, 2019 mercury exceedance was addressed in a separate NOV issued on February 27, 2020

or will result, in violation of any provisions of 40 C.F.R. 63." Holcim also violated COMAR 26.11.02.05, which prohibits a person from violating any term or condition of an issued permit;

WHEREAS, per the second half 2019 SIXMON report, Holicm failed to timely perform the quarterly calibration audit for the thermocouple system used for the monitoring of dioxin/furan emissions from the cement kiln. Holcim reported that it was unable to complete a calibration audit due on September 27, 2019 until October 7, 2019;

WHEREAS, the delayed calibration audit reported in the second half 2019 SIXMON report is a violation of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said deviation, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, per the second half 2019 SIXMON report, Holcim failed to timely perform the quarterly calibration audit on the mercury CEMS during Q3 in 2019. Holcim reported that it was unable to complete the calibration audit on July 1, 2019, until September 30, 2019;

WHEREAS, the delayed calibration audit reported in the second half 2019 SIXMON report is a violation of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said deviation, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, per the second half 2019 SIXMON report, Holicm failed to perform visible emissions observations on the finish mill systems when in operation on the following days; July 5-6, 2019, July 14, 2019, August 11, 2019 and November 7-8, 2019; WHEREAS, the visible emission deviations reported in the second half 2019 SIXMON report is a violation of 40 C.F.R Part 63, Subpart LLL, and, that as a result of said deviation, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, per the second half 2019 SIXMON report, Holicm failed to perform follow-up Method 9 visible emission observations on the finish mill systems on the following days; August 15-16, 2019, August 21, 2019, August 24-29, 2019, September 15-16, 2019, October 15-24, 2019, and October 28-29, 2019;

WHEREAS, the visible emission deviations reported in the second half 2019 SIXMON report is a violation of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said deviation, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, per the second half 2019 SIXMON report, Holcim failed to initiate follow-up corrective actions within one hour of observing visible emissions or failed to document sufficiently the follow-up corrective actions for the finish mill system. The failure to initiate or document follow-up corrective actions occurred on July 1, 2019, August 8, 2019, August 12, 2019, August 14, 2019, August 17-20, 2019, August 23, 2019, September 14, 2019, October 2, 2019, October 15, 2019, October 23, 2019, and October 27, 2019;

WHEREAS, the failed follow-up corrective actions reported in the second half 2019 SIXMON report is a violation of 40 C.F.R. Part 63, Subpart LLL, and, that as a result of said deviation, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, per the first half 2020 SIXMON and Q1 2020 CEM reports, Holcim exceeded their 30-day rolling average emissions limit for mercury from January 6-10, 2020;

WHEREAS, the mercury exceedance reported in recorded in Holcim's first half 2020 SIXMON and Q1 2020 CEM reports are violations of 40 C.F.R Part 63, Subpart LLL, and, that as a result of said exceedance, Holcim violated COMAR 26.11.15.02(C), which states, "A person may not construct, reconstruct, or operate, or cause to be constructed, reconstructed, or operated a MACT source which results, or will result, in violation of any provisions of 40 C.F.R. 63";

WHEREAS, per the first half 2020 SIXMON and Q2 2020 CEM reports, Holcim exceeded their 30-day rolling average SO2 emission limit of 1.6 lb/ton clinker from April 12-16, 2020;

WHEREAS, the SO₂ limit is included in both Holcim's Part 70 Permit and Permit to Construct and exceedances of this limit is a violation of COMAR 26.11.02.05;

WHEREAS, per the first half 2020 SIXMON report, Holcim failed to submit their 2nd half 2019 semi-annual monitoring report to the Department within 30 days of the end of the reporting period. Holcim reported that the semi-annual monitoring report was late from February 1, 2020 to February 26, 2020;

WHEREAS, per the 2019 Compliance Certification Report, visible observations on the finish grinding system were missed or corrective actions were not initiated within one hour of visible emissions being observed on the following dates: July 1, 2019, August 8, 2019, August 12, 2019, August 14-21, 2019, August 23-29, 2019, September 14-16, 2019, October 2, 2019, October 11, 2019, October 14-24, 2019, October 27-29, 2019;

WHEREAS, the Department and Holcim agree that resolution of the Department's claims against Holcim for the Alleged Violations, without the expense and inconvenience of litigation, is in the best interest of the parties and in the public interest;

WHEREAS, it is expressly understood that this Settlement Agreement pertains to the civil violations described herein, and that the Department has made no promises or representations other than those contained in this Agreement, and that no other promises or representations will be made unless in writing. The Department has no authority over any criminal actions.

NOW THEREFORE, in consideration of the foregoing and the mutual agreements set forth herein, the parties agree to the following:

PENALTY

1. Holcim shall pay a penalty of one hundred and ten thousand dollars (\$110,000) to resolve the Alleged Violations. The Department shall send an invoice to Holcim for the amount of \$110,000, and Holcim shall make payment by a single check or money order for the entire \$110,000 payment by the due date of the invoice. The invoice shall allow 30 days for payment. The check or money order shall be made payable to the Maryland Department of the Environment/Clean Air Fund, and shall be mailed to P.O. Box 2037, Baltimore Maryland 21203-2037.

2. Holcim acknowledges that the penalty described in Paragraph 1 constitutes a civil penalty arising from a State enforcement action, and is for the benefit of a governmental unit.

Pursuant to 11 U.S.C. § 523(a)(7), this civil penalty is not dischargeable in any bankruptcy proceeding.

STIPULATED PENALTIES

3. For twelve (12) months following the execution of this Agreement, and upon written demand from the Department, Holcim shall be subject to pay stipulated penalties as follows:

- Any exceedance of the 1.6 lb/ton of clinker 30-day rolling average SO2 limit included in Holcim's Part 70 Permit and Permit to Construct is - \$7,500;
- b. Any exceedance of the 24 ppmvd @7% oxygen for a 30-day rolling average THC limit included in Holcim's Permit and Table 1 of 40 CFR §63.1343(b)(1) is - \$7,500; and
- c. Any exceedance of the 55-pounds per million tons (lb/MM tons) of clinker for a thirty-day rolling average mercury emissions limit, pursuant to Holcim's Part 70 Permit is - \$7,500.

4. Holcim shall pay stipulated penalties within thirty (30) days after the

Department's written demand.

5. Any demand for stipulated penalties shall be mailed by First Class U.S. Mail to:

Holcim (US), Inc. 1260 Security Rd

Hagerstown, MD 21742.

6. Except as otherwise expressly set forth in this Agreement, none of the stipulated penalties in this Agreement shall be construed as an election of remedy or other limitation on the

Department's discretion to seek in lieu of stipulated penalties any other remedy or sanction available to it for violations of this Agreement or any other violation of State law or regulation not expressly made the subject of this Agreement. The Department's failure to demand any stipulated penalty under this Agreement does not constitute a waiver of the Department's right to make such a demand.

7. Except as otherwise expressly set forth in this Agreement, payment of any stipulated penalty shall not relieve Holcim from the obligations imposed by this Agreement, any permit that may be issued, or any statute or regulation, nor shall such payment limit the right of the Department to seek enforcement of the terms of this Agreement or any other statute or regulation.

RELEASE

8. Subject to Holcim's fulfillment of the requirement of Paragraphs 1, the Department releases, resolves, and settles any civil liability claims against Holcim, its past or present officers, directors, agents, employees, representatives, predecessors, affiliates, parent or subsidiary companies, successors or assigns, that the Department may have under Maryland law or regulations for the Alleged Violations.

EFFECT OF AGREEMENT

9. Other than the Department's release in Paragraph 8, nothing in this Settlement Agreement shall be construed to limit any authority of the Department to issue orders, enforce applicable licenses, or to take any other act permitted under applicable law that it deems necessary to protect the public health or safety, or to limit any other authority the Department now has or may hereafter be delegated. 10. Other than the Department's release in Paragraph 8, nothing in this Settlement Agreement shall be deemed to be a waiver of the Department's right to seek any, and all, legal and equitable remedies available to it for violation of any applicable statute, regulation, permit, license, or order, nor shall anything set forth in this Agreement be deemed to be a waiver of Holcim's right to contest such proceedings by the Department.

11. Holcim's execution of this Settlement Agreement shall not constitute an admission or adjudication of liability or fact with regard to the Alleged Violations.

12. Nothing in this Settlement Agreement shall be construed to alter Holcim's obligation to comply with all applicable federal, State, or local statutes, regulations, permits, or licenses.

GENERAL PROVISIONS

13. The terms of this Settlement Agreement are binding on the parties and shall be enforceable in the Maryland courts. In the event Holcim fails to take the actions identified in this Settlement Agreement, the Department may institute an action to enforce this Agreement against Holcim. In such action, this Settlement Agreement shall be governed by and interpreted under the laws of the State of Maryland.

14. Nothing in this Agreement creates any rights in persons other than the Department and Holcim.

15. The terms of this Settlement Agreement are contractual and not mere recitals. This Settlement Agreement may be modified only in writing signed by both the Department and Holcim. 16. This Settlement Agreement has been negotiated freely by the Department and Holcim and shall in all cases be construed as a whole, according to its fair meaning and not strictly for or against the Department or Holcim.

17. This Settlement Agreement constitutes the entire agreement between the Department and Holcim settling the Alleged Violations. No other prior or contemporaneous written or oral agreement, action, or statement regarding the matters described herein shall be valid or have any bearing on the interpretation, application, or enforcement of the Agreement.

18. It is the intent of the parties that the provisions of this Settlement Agreement are non-severable and that, should any provision be declared by a court of law to be invalid or unenforceable, the other provisions shall be null and void. In such event, the Department shall have the right to seek any and all legal and equitable remedies available to it for any violations, including the Alleged Violations.

19. This Settlement Agreement shall be deemed effective as of the date the last party signs the Settlement Agreement.

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FOR HOLCIM (US) INC .:

2021 Date

Signatur

-PLANT MANAGER ALAN GREER

Printed Name, Title

FOR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT:

1/24/ Date 2022

lanis George S. Aburn, Director

George S. Aburn, Director Air and Radiation Administration Maryland Department of the Environment

Approved this _____14 day of January 20222 as to form and legal sufficiency.

Cynthia Weisz

Cynthia M. Weisz Assistant Attorney General