**UNITED STATES DISTRICT COURT**
**SOUTHERN DISTRICT OF OHIO**
**WESTERN DIVISION**

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| **UNITED STATES OF AMERICA,** | ) | |
| **Plaintiff,** | ) | |
| **and the STATE OF OHIO,** | ) | |
| **Plaintiff-Intervenor,** | ) | **Civil Action No.** |
| **v.** | ) | |
| **CEMEX, INC. and CEMEX CONSTRUCTION MATERIALS ATLANTIC, LLC,** | ) | |
| **Defendants.** | ) | |

**CONSENT DECREE**

WHEREAS, Plaintiff, the United States of America (the "United States"), on behalf of the United States Environmental Protection Agency ("EPA"), has, simultaneously with the lodging of this Consent Decree, filed a Complaint against the Defendants CEMEX, Inc. ("CEMEX") and CEMEX Construction Materials Atlantic, LLC ("CEMEX Atlantic") (collectively "CEMEX Companies"), pursuant to Sections 113(b) and 167 of the Clean Air Act ("Clean Air Act" or "the Act"), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and the assessment of civil penalties for violations of: (a) the Prevention of Significant Deterioration ("PSD") provisions of the Act, 42 U.S.C. §§ 7470-7492, and the PSD regulations incorporated into the federally enforceable Ohio Implementation Plan ("Ohio SIP"); and (b) Title V of the Act, 42 U.S.C. §§ 7661-7661f, and Title

V's implementing federal and Ohio regulations, at a portland cement manufacturing plant located in Greene County, Ohio (the "Facility");

WHEREAS, in its Complaint, the United States alleges, *inter alia*, that the CEMEX Companies failed to obtain the necessary PSD permit and install the controls necessary under the Act to reduce sulfur dioxide ("$SO_2$") and nitrogen oxides ("$NO_x$"), and that the CEMEX Companies failed to obtain an operating permit under Title V of the Act and Title V's implementing federal and Ohio regulations that reflects applicable requirements imposed under the PSD requirements of the Act and the Ohio SIP;

WHEREAS, the Complaint alleges claims upon which relief can be granted against the CEMEX Companies under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477;

WHEREAS, the State of Ohio has filed a Complaint in Intervention;

WHEREAS, EPA issued a Notice of Violation/Finding of Violation to CEMEX pursuant to Section 113(a)(1) and (a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (a)(3), on March 31, 2005 (with mailing on April 1, 2005) for, *inter alia*, violations of the PSD provisions of the Act and the PSD regulations incorporated into the Ohio SIP, and EPA provided a copy of the NOV/FOV to the State of Ohio;

WHEREAS, CEMEX Atlantic and the State of Ohio have actual notice of the violations alleged against CEMEX Atlantic in the Complaint filed in this case, and the CEMEX Companies stipulate that they have received actual notice of the violations alleged in the Complaint and the Complaint in Intervention and that they do not contest the adequacy of the notice provided;

WHEREAS, the United States provided notice of the commencement of this action to the State of Ohio, pursuant to Section 113(b) of the Act, 42 U.S.C. § 7413(b);

WHEREAS, the United States, the State of Ohio, and the CEMEX Companies ("the Parties") have agreed that settlement of this action is in the best interest of the parties and in the public interest, have agreed on the appropriateness of various measures intended to resolve the alleged violations and have further agreed that entry of this Consent Decree without litigation is the most appropriate means of resolving this matter;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties and that this Consent Decree is fair, reasonable, and in the public interest;

WHEREAS, the CEMEX Companies deny the violations alleged in the Complaint, and nothing herein shall constitute an admission of liability;

NOW, THEREFORE, before trial and without the final adjudication, or admission, of any issue of fact or law except as provided in Section I. (Jurisdiction and Venue), below, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

## I. JURISDICTION AND VENUE

1. This Court has jurisdiction of the subject matter herein pursuant to Sections 113(b), 167, and 304(a) of the Act, 42 U.S.C. §§ 7413(b), 7477, and 7604(a), and pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367(a) and over the Parties. Venue is proper in this District pursuant to Sections 113(b) and 304(c) of the Act, 42 U.S.C. §§ 7413(b) and 7604(c), and under 28 U.S.C. §§ 1391(b) and (c) and 1395(a). For purposes of this Consent Decree, or any action to enforce this Decree, the CEMEX Companies consent to the Court's jurisdiction over this Decree and any such action and over the CEMEX Companies and consent to venue in this judicial district.

## II. APPLICABILITY

2. The obligations of this Consent Decree apply to and are binding upon the United States; the State of Ohio; and the CEMEX Companies and any successors, assigns, or other entities or persons otherwise bound by law.

3. At least 30 Days prior to any transfer of ownership or operation of the Facility, the CEMEX Companies shall provide a copy of this Consent Decree to the proposed transferee and shall simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement, to the United States and to the State, in accordance with Section XVI. (Notices) of this Consent Decree. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve the CEMEX Companies of their obligation to ensure that the terms of the Decree are implemented, unless (a) the transferee agrees to undertake the obligations required by Sections V. (Compliance Requirements), VI. (Prohibition on Netting Credits or Offsets), VII. (Permits), VIII. (Review and Approval of Submittals), IX. (Reporting Requirements), X. (Stipulated Penalties), XI. (Force Majeure), XII. (Dispute Resolution), and XIII. (Information Collection and Retention) of this Decree and to be substituted for the CEMEX Companies as a Party under the Decree and thus be bound by the terms thereof; (b) the United States and the State consent to relieve the CEMEX Companies of their obligations; and (c) the transferee becomes a party to this Consent Decree with respect to the transferred Facility, pursuant to Section XIX. (Modification). Any attempt to transfer ownership or operation of the Facility, or any portion thereof, without complying with this Paragraph constitutes a violation of this Decree.

4. The CEMEX Companies shall provide a copy of this Consent Decree to all officers,

employees, and agents whose duties might reasonably include compliance with any provision of this Consent Decree, as well as to any Contractor retained to perform work required under this Consent Decree. The CEMEX Companies shall condition any such contract upon performance of the work in conformity with the terms of this Consent Decree.

5. In any action to enforce this Consent Decree, the CEMEX Companies shall not raise as a defense the failure by any of its officers, directors, employees, agents, or Contractors to take any actions necessary to comply with the provisions of this Consent Decree.

## III. DEFINITIONS

6. Terms used in this Consent Decree that are defined in the Act or in regulations promulgated 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:

(a) "30-Day Rolling Average Emission Rate" shall mean the rate of emission of a specified air pollutant ($NO_x$ or $SO_2$) expressed as pounds (lb) per Ton of clinker produced ("lb $NO_x$/Ton of clinker" or "lb $SO_2$/Ton of clinker") at the Xenia Kiln and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Xenia Kiln during an Operating Day and the previous 29 Operating Days, as measured pursuant to Section V.A.3. ($NO_x$ Continuous Emission Monitoring System) or Section V.B.2. ($SO_2$ Continuous Emission Monitoring System), as applicable ("30 Day Rolling Period"); second, sum the total Tons of clinker produced by the Xenia Kiln during the same Operating Day and the previous 29 Operating Days; and third, divide the total number of pounds of the specified pollutant emitted from the Xenia Kiln during the 30 Operating Days referred to above by the total Tons of clinker produced at the

Xenia Kiln during the same 30 Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions of the relevant pollutant from the Kiln during all periods of Kiln Operation on any Kiln Operating Day, including emissions during each Startup, Shut Down, or Malfunction. If the CEMEX Companies assert that a Malfunction and any resulting kiln Shut Down and Startup is a Force Majeure event within the meaning of Section XI. (Force Majeure), the CEMEX Companies shall include all such emissions in the calculation of the 30-Day Rolling Average Emission Rate, but may not be subject to stipulated penalties for a violation of an applicable emission limitation pursuant to Section X. (Stipulated Penalties) to the extent that emissions associated with the particular Malfunction and any resulting kiln Shut Down and Startup cause an emission violation and the Malfunction and any resulting kiln Shut Down and Startup is determined to be a Force Majeure event under Section XI. (Force Majeure) and the CEMEX Companies have complied with the requirements of that Section.

(b) "Alkali Bypass Stack" or "Bypass Stack" means the exhaust stack of the Xenia Kiln that vents gases that bypass the kiln preheater tower to the atmosphere.

(c) "Alternative $NO_x$ Emission Limit" shall mean a limitation on the rate of $NO_x$ emitted from the Xenia Kiln expressed as lb $NO_x$/Ton of clinker that is either proposed by the CEMEX Companies no later than 60 Days following the end of the $NO_x$ Demonstration Period pursuant to Appendix C and approved by EPA, or established by EPA as a result of EPA's review of the $NO_x$ Demonstration Period Final Report, other data submitted or developed pursuant to the Consent Decree, and any other available and relevant information.

(d) "Business Day" means any day, except for Saturday, Sunday and federal

holidays.

(e) "CEMEX" shall mean CEMEX, Inc.

(f) "CEMEX Atlantic" shall mean CEMEX Construction Materials Atlantic, LLC.

(g) "CEMEX Companies" shall mean CEMEX, Inc. and CEMEX Construction Materials Atlantic, LLC, or either of these entities.

(h) "CEMS" or "Continuous Emission Monitoring System" shall mean, for obligations involving $NO_x$ or $SO_2$ under this Consent Decree, the total equipment and software required to sample and condition (if applicable), to analyze, and to provide a record of $NO_x$ and $SO_2$ emissions rates, and the raw data necessary to support the reported emissions rates.

(i) "Commence" or "Commencement" of operation of a pollution control technology that is required to be installed and operated pursuant to this Consent Decree shall mean to begin the introduction of the reagent employed by the pollution control technology.

(j) "Complaint" shall mean the complaint filed by the United States in this action.

(k) "Complaint in Intervention" shall mean the complaint filed by the State of Ohio in this action.

(l) "Consent Decree" or "Decree" shall mean this Decree and all Appendices attached hereto listed in Section XXVI. (Appendices).

(m) "Continuously Operate" or "Continuous Operation" shall mean that the SNCR or LSA (or alternative pollution control technology approved by EPA pursuant to Paragraph 102 of this Consent Decree) that are installed pursuant to this Consent Decree shall be operated at all times of Xenia Kiln Operation consistent with the technological limitations (including but not limited to

exhaust temperatures), manufacturers' specifications, and good engineering and maintenance practices for such pollution control technology and the Xenia Kiln, and good air pollution control practices for minimizing emissions.

(n) "Contractor" shall mean any person or entity hired by the CEMEX Companies to perform services on their behalf necessary to comply with the provisions of this Consent Decree.

(o) "Date of Lodging" shall mean the date the Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Ohio.

(p) "Day" shall mean a calendar day unless expressly stated to be a Business Day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next Business Day.

(q) "Effective Date" shall have the meaning given in Section XVII. (Effective Date).

(r) "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

(s) "Facility" shall mean the CEMEX Companies portland cement manufacturing plant located in Greene County, Ohio, with an address in its Clean Air Act Title V permit of 3250 Linebaugh Road, Xenia, OH 45385.

(t) "Kiln" or "Xenia Kiln" as used in this Consent Decree shall have the same meaning as defined at 40 C.F.R. § 63.1341 and shall mean the Cement Preheater/Kiln, including its Main Stack and the Alkali Bypass Stack, at the Facility identified in the Facility's Clean Air Act Title V permit as Emission Unit P003.

(u) "Kiln Operation" or "Xenia Kiln Operation" shall mean, with respect to the Xenia Kiln, any period when any raw materials are fed into the Xenia Kiln or any period when any combustion is occurring or fuel is being fired in the Xenia Kiln.

(v) "Lime Spray Absorber" or "LSA" shall mean a pollution control system that injects lime or another similar alkaline reagent into the Alkali Bypass Stack gas stream at the Xenia Kiln for the purpose of reducing $SO_2$ emissions.

(w) "Main Stack of the Xenia Kiln" or "Xenia Kiln Main Stack" or "Main Stack" means the exhaust stack of the Xenia Kiln that vents gases from the kiln preheater tower to the atmosphere.

(x) "Malfunction" as used in this Consent Decree shall have the same meaning as defined at 40 C.F.R. § 60.2.

(y) "$NO_x$" shall mean oxides of nitrogen, measured in accordance with the provisions of this Consent Decree and expressed as nitrogen dioxide ("$NO_2$").

(z) "Non-attainment NSR" shall mean the non-attainment area New Source Review ("NSR") program within the meaning of Part D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7501-7515, 40 C.F.R. Part 51, and the Ohio State Implementation Plan.

(aa) "Operating Day" shall mean any Day on which Xenia Kiln Operation has occurred.

(bb) "Optimized SNCR" shall mean the SNCR after performance of the SNCR is optimized pursuant to the requirements of Paragraph 15 and Appendix B and after the CEMEX Companies have submitted and EPA has reviewed and approved the SNCR Optimization Report.

(cc) "Paragraph" shall mean a portion of this Decree identified by an arabic

numeral.

(dd) "Parties" shall mean the United States, the State of Ohio, and the CEMEX Companies.

(ee) "PSD" shall mean the Prevention of Significant Deterioration program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 40 C.F.R. Part 52, and the Ohio State Implementation Plan.

(ff) "Regional Air Pollution Control Agency" or "RAPCA" shall mean RAPCA acting as the delegated authority representing the Director of the Ohio EPA in Greene County, in accordance with the Ohio Revised Code ("ORC") Section 3704.111(A) and per the Delegation Agreement dated October 1, 1993.

(gg) "Section" shall mean a portion of this Decree identified by a roman numeral.

(hh) "Selective Non-Catalytic Reduction" or "SNCR" shall mean a pollution control system that injects an ammonia-based reagent into the gas stream without the use of a catalyst for the purpose of reducing $NO_x$ emissions.

(ii) "SIP" shall mean the Ohio State Implementation Plan as submitted to and approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410.

(jj) "Shut Down" shall mean the cessation of Xenia Kiln Operation.

(kk) "Startup" shall mean the beginning of Xenia Kiln Operation.

(ll) "State" shall mean the State of Ohio, acting on behalf of Ohio EPA and RAPCA.

(mm) "$SO_2$" shall mean sulfur dioxide, measured in accordance with the provisions of this Consent Decree.

(nn) "Title V permit" shall mean a permit required by or issued pursuant to the requirements of 42 U.S.C. §§ 7661-7661f.

(oo) "Ton" or "Tons" shall mean short ton or short tons.

(pp) "United States" shall mean the United States of America, acting on behalf of EPA.

## IV. CIVIL PENALTIES

7. Within 30 Days after the Effective Date of this Consent Decree, the CEMEX Companies shall pay $1,400,000 in civil penalties as further described in this Section.

8. The CEMEX Companies shall pay the sum of $932,400 as a civil penalty to the United States, together with interest accruing from the Date of Lodging, at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging. Such civil penalty shall be paid by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to the CEMEX Companies, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio, Federal Building, 200 West Second Street, Suite 600, Dayton, OH 45402, phone: (937) 225-2910. At the time of payment, the CEMEX Companies shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalties owed pursuant to the Consent Decree in United States, et al. v. CEMEX, Inc., et al., and shall reference the civil action number and DOJ case number 90-5-2-1-08990, to the United States in accordance with Section XVI. (Notices) of this Decree; by email to acctsreceivable.CINWD@epa.gov; and to:

U.S. EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

9. No later than 30 Days after the Effective Date of this Consent Decree, the CEMEX Companies shall pay a civil penalty of $233,800 to the State of Ohio and pay a civil penalty of $233,800 to RAPCA, together with interest accruing from the Date of Lodging at the rate specified in 28 U.S.C. § 1961 as of the Date of Lodging.

(a) Payment of the State of Ohio's civil penalty shall be made to the State of Ohio by delivering two certified checks to Karen Pierson or her successor, Paralegal, Office of the Attorney General of Ohio, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, payable to the order of "Treasurer, State of Ohio" as follows:

(i) In lieu of payment of 20% of the State of Ohio's civil penalty, the CEMEX Companies shall make a contribution in the amount of $46,760 as a State supplemental environmental project to the Ohio EPA's Clean Diesel School Bus Program Fund (Fund 5CD0). The memorandum portion of the check, or some other prominent location on the transmittal letter or documentation, shall include a reference to "A.G. EAGO No. 404460."

(ii) The CEMEX Companies shall pay the remaining 80% – $187,040 – of the State of Ohio's portion of the civil penalty by certified check. The memorandum portion of the check, or some other prominent location on the transmittal letter or documentation, shall include a reference to "A.G. EAGO No. 404460."

(b) Payment shall be made to RAPCA by delivering a certified check, payable to the "Air Resources Study Trust fund" mailed to Casie Lord, RAPCA, 117 South Main Street, Dayton, Ohio 45422-1280.

10. The CEMEX Companies shall not deduct any penalties paid under this Decree pursuant to this Section or Section X. (Stipulated Penalties) in calculating its federal, state, or local income taxes.

## V. COMPLIANCE REQUIREMENTS

### A. $NO_x$ Emission Reduction, Control Technology, Emission Limitations, and Monitoring Requirements

#### 1. $NO_x$ Emission Reduction and Control Technology Requirements

11. $NO_x$ Emission Reduction Study. Prior to installation of the SNCR pursuant to Paragraph 14 to reduce $NO_x$ emissions from the Main Stack of the Xenia Kiln and by no later than 270 Days of the Date of Lodging or 30 Days following the Effective Date of the Consent Decree, whichever is later, the CEMEX Companies shall, pursuant to Appendix A ($NO_x$ Emission Reduction Study), complete a $NO_x$ Emission Reduction Study and submit a $NO_x$ Emission Reduction Report to EPA identifying $NO_x$ emission reduction measures to be undertaken at the Xenia Kiln. The CEMEX Companies shall submit the $NO_x$ Emission Reduction Report to EPA for review and approval pursuant to Section VIII. (Review and Approval of Submittals) identifying proposed measures to reduce $NO_x$ emissions from the Xenia Kiln and a proposed schedule to implement such proposed measures.

12. Within 60 Days following EPA's approval of the CEMEX Companies' proposed measures and implementation schedule set forth in its $NO_x$ Emission Reduction Report, the CEMEX Companies shall begin implementation of the approved measures. Implementation of the approved measures shall be completed in the manner, and in accordance with the schedule, established in EPA's approval. The CEMEX Companies shall thereafter operate the Xenia Kiln in a manner

consistent with the approved measures, or any revised measures approved by EPA pursuant to Section VIII. (Review and Approval of Submittals).

13. Design, Installation and Optimization of SNCR. The CEMEX Companies shall contract with a Contractor that has experience in the design and installation of SNCR technology ("Qualified Contractor") for the design and installation of the SNCR at the Xenia Kiln to control $NO_x$ emissions from the Main Stack. The CEMEX Companies shall use their reasonable best efforts to contract with a Qualified Contractor to design the SNCR so that the Xenia Kiln can achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker taking into account implementation of the approved measures pursuant to Paragraph 12. If, despite their reasonable best efforts, the CEMEX Companies are unable to execute a contract with a Qualified Contractor to design the SNCR to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker at the Xenia Kiln, then the CEMEX Companies shall (a) contract with a Qualified Contractor to design the SNCR for the Main Stack to achieve the greatest emission reductions of $NO_x$ possible for the Xenia Kiln; and (b) submit a SNCR Design Report to EPA for review and approval pursuant to Section VIII. (Review and Approval of Submittals) prior to executing a contract with a Qualified Contractor for the installation of the SNCR for reducing $NO_x$ emissions from the Xenia Kiln Main Stack. Prior to executing a contract for design of the SNCR under Paragraph 13(a), the CEMEX Companies shall submit to EPA documentation of their efforts undertaken to contract with a Qualified Contractor to design the SNCR so that the Xenia Kiln can achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker.

14. The CEMEX Companies shall install and commence Continuous Operation of the

SNCR, which shall meet the design criteria approved by EPA pursuant to Paragraph 13 if such approval is required by Paragraph 13, to reduce $NO_x$ emissions from the Main Stack of the Xenia Kiln by no later than 18 months after the Effective Date, or 6 months after receipt of EPA's approval, if required, under Paragraph 13, whichever is later. CEMEX shall submit a SNCR Design Report, if required, no later than 60 Days after beginning implementation of $NO_x$ emission reduction measures pursuant to Paragraph 12.

15. By no later than 90 Operating Days following the installation of the SNCR at the Xenia Kiln, the CEMEX Companies shall complete the optimization of the SNCR pursuant to the requirements of Appendix B and submit the SNCR Optimization Report required by paragraph 11 of Appendix B to EPA for review and approval pursuant to Section VIII. (Review and Approval of Submittals).

**2. $NO_x$ Emission Limitations**

16. Beginning no later than 10 Business Days from EPA's approval of the SNCR Optimization Report, and continuing each Day thereafter, the CEMEX Companies shall Continuously Operate the SNCR consistently with the approved SNCR Optimization Report.

17. The first 365 Operating Days following the commencement of Continuous Operation of the Optimized SNCR shall comprise the $NO_x$ Demonstration Period. During this period, the CEMEX Companies shall: (a) make their best efforts to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker at the Xenia Kiln; (b) comply with the requirements of Appendix C; and (c) operate the Xenia Kiln in a manner consistent with normal operation and not adjust any operating parameters with the intention of increasing $NO_x$ emissions. EPA reserves the right to extend, and the CEMEX Companies reserve the right to request

to extend, the $NO_x$ Demonstration Period for a period longer than the first 365 Operating Days due to abnormal operation of either the Kiln, the SNCR, or the $NO_x$ CEMS for such period of time as is necessary to collect sufficient data regarding the Xenia Kiln's emissions.

18. The CEMEX Companies shall use their best efforts to complete the $NO_x$ Demonstration Period as soon as possible but in any event, the CEMEX Companies shall complete the $NO_x$ Demonstration Period by no later than 2 years following EPA's approval of the SNCR Optimization Report.

19. During the $NO_x$ Demonstration Period or any period before a final $NO_x$ emission limit is determined pursuant to Paragraphs 21-27, the CEMEX Companies' inability to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker at the Xenia Kiln shall not be deemed a violation of this Consent Decree, nor shall the CEMEX Companies be responsible for stipulated penalties pursuant to Section X. (Stipulated Penalties) based on exceeding a 30-Day Rolling Average Emission Rate of 1.85 lb $NO_x$/Ton of clinker at the Xenia Kiln. However, during the $NO_x$ Demonstration Period and the period after its completion but before a final $NO_x$ emission limit is determined in accordance with Paragraphs 21-27, the CEMEX Companies shall be responsible for stipulated penalties pursuant to Section X. (Stipulated Penalties) if the Xenia Kiln exceeds a 30-Day Rolling Average Emission Rate of 3.11 lb $NO_x$/Ton of clinker, except as provided by Paragraph 23.

20. A final $NO_x$ emission limit under this Consent Decree shall be determined in accordance with Paragraphs 21-27.

21. If the Xenia Kiln achieves and maintains a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker during the $NO_x$ Demonstration Period as reported by the

$NO_x$ CEMS, or if the CEMEX Companies fail to submit a Notice of Intent to Submit a $NO_x$ Demonstration Period Final Report (pursuant to Paragraph 22 and Appendix C, paragraph 7) proposing an Alternative $NO_x$ Emission Limit within 25 Days after the conclusion of the $NO_x$ Demonstration Period, then commencing no later than 25 Days after completion of the $NO_x$ Demonstration Period, and continuing thereafter, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker as the final $NO_x$ emission limit and will be subject to stipulated penalties for failure to do so pursuant to Section X. (Stipulated Penalties). If, after providing a Notice of Intent to Submit a $NO_x$ Demonstration Period Final Report proposing an Alternative $NO_x$ Emission Limit within 25 Days after the conclusion of the $NO_x$ Demonstration Period, the CEMEX Companies fail to submit a $NO_x$ Demonstration Period Final Report proposing an Alternative $NO_x$ Emission Limit (pursuant to Paragraph 22 and Appendix C, paragraph 7) within 60 Days after the conclusion of the $NO_x$ Demonstration Period, then commencing no later than 60 Days after completion of the $NO_x$ Demonstration Period, and continuing thereafter, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker as the final $NO_x$ emission limit and will be subject to stipulated penalties for failure to do so pursuant to Section X. (Stipulated Penalties). Solely for the purposes of this Paragraph, the Xenia Kiln shall have achieved and maintained a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker during the $NO_x$ Demonstration Period if 99% or more of the Operating Days in the $NO_x$ Demonstration Period are at or below a 30-Day Rolling Average Emission Rate of 1.85 lb $NO_x$/Ton of clinker.

22. If the CEMEX Companies seek to demonstrate to EPA that the Xenia Kiln could not

achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker during the $NO_x$ Demonstration Period, then (a) by no later than 25 Days after completion of the $NO_x$ Demonstration Period the CEMEX companies will notify EPA and the State of their intent to submit a $NO_x$ Demonstration Period Final Report; and (b) by no later than 60 Days following the end of the $NO_x$ Demonstration Period, the CEMEX Companies shall submit a $NO_x$ Demonstration Period Final Report to EPA pursuant to Appendix C that shall be subject to EPA's review and approval, after consultation with the State, pursuant to Section VIII. (Review and Approval of Submittals). In this Report, the CEMEX Companies shall propose an Alternative $NO_x$ Emission Limit for the Xenia Kiln that represents the lowest emission limit that the Xenia Kiln can achieve and maintain during normal source operations on a 30-Day rolling average basis, calculated in accordance with Paragraph 6(a) of the Consent Decree, based upon all available data and information collected during the $NO_x$ Demonstration Period, including periods of Startup and Shut Down. The proposed Alternative $NO_x$ Emission Limit shall, at a minimum, reflect the Continuous Operation of the Optimized SNCR to control emissions from the Main Stack of the Xenia Kiln (pursuant to Paragraph 16, above) and implementation of the approved $NO_x$ emission reduction measures (pursuant to Paragraph 12, above). In no event shall the CEMEX Companies propose an Alternative $NO_x$ Emission Limit greater than 3.11 lb $NO_x$/Ton of clinker. Upon request by EPA, the CEMEX Companies shall submit any additional available data that EPA determines it needs to evaluate the demonstration.

23. If the CEMEX Companies propose, pursuant to Appendix C, an Alternative $NO_x$ Emission Limit in the $NO_x$ Demonstration Period Final Report, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than the proposed

Alternative $NO_x$ Emission Limit immediately upon submission of the $NO_x$ Demonstration Period Final Report, and will be subject to stipulated penalties for the failure to do so pursuant to Section X. (Stipulated Penalties).

24. Following receipt of the $NO_x$ Demonstration Period Final Report, EPA, after consultation with the State, may either (a) determine that the CEMEX Companies failed to demonstrate that the Xenia Kiln could not achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker during the $NO_x$ Demonstration Period and determine 1.85 lb $NO_x$/Ton of clinker to be the final emission limit for the Xenia Kiln; (b) approve the CEMEX Companies' proposed Alternative $NO_x$ Emission Limit as the final emission limit for the Xenia Kiln; or (c) establish a different Alternative $NO_x$ Emission Limit as the final emission limit for the Xenia Kiln as a result of EPA's review of the $NO_x$ Demonstration Period Final Report and other data submitted or developed pursuant to the Consent Decree, as well as all other available and relevant information.

25. Within 60 Days after receiving notice of EPA's determination under Paragraph 24(a), and continuing thereafter, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker and be subject to stipulated penalties for failure to do so pursuant to Section X. (Stipulated Penalties) as the final $NO_x$ emission limit.

26. Upon receiving notice of EPA's determination under Paragraph 24(b), the CEMEX Companies shall continue to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than the approved Alternative $NO_x$ Emission Limit as the final $NO_x$ emission limit and be subject to stipulated penalties for failure to do so pursuant to Section X. (Stipulated Penalties) as

specified in Paragraph 23, above.

27. Within 60 Days after receiving notice of EPA's determination under Paragraph 24(c), and continuing thereafter, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than the EPA-established Alternative $NO_x$ Emission Limit as the final $NO_x$ emission limit and be subject to stipulated penalties for failure to do so pursuant to Section X. (Stipulated Penalties).

**3. $NO_x$ Continuous Emission Monitoring System**

28. Within 150 Days of the Date of Lodging of the Consent Decree, and continuing thereafter, the CEMEX Companies shall install, certify, and operate $NO_x$ CEMS at both the main stack and the alkali bypass stack at the Xenia Kiln. The $NO_x$ CEMS shall meet 40 C.F.R. Part 60, Appendix B Performance Specifications 2 and 6 requirements, and shall be calibrated and maintained in accordance with 40 C.F.R. Part 60, Section 60.13 and Appendix F. The $NO_x$ CEMS shall be certified by Ohio EPA's Central Office. Certification shall be acknowledged by Ohio EPA's Central Office upon satisfactorily completing initial Performance Specification testing using 40 C.F.R. Part 60, Appendix A, Test Methods 1-4 and 7E, and submitting results for review.

29. Except as otherwise provided in 40 C.F.R Part 60, the CEMEX Companies shall operate the $NO_x$ CEMS at all times during Xenia Kiln Operation. $NO_x$ CEMS shall be used: (a) in calculating the 30-Day Rolling Average Emission Rate for $NO_x$ established in Section V.A.2. ($NO_x$ Emission Limitations); and (b) for purposes of the $NO_x$ Emission Reduction Study required pursuant to Paragraph 11 and Appendix A, and the $NO_x$ Demonstration Period pursuant to Paragraph 17 and Appendix C.

30. For purposes of this Consent Decree, all $NO_x$ emissions rates shall be measured by the

$NO_x$ CEMS. During any time when either of the $NO_x$ CEMs are inoperable or otherwise not measuring and recording valid $NO_x$ emissions data, the CEMEX Companies shall use the missing data substitution procedures in 40 C.F.R. Part 75, Subpart D, and shall report $NO_x$ CEMS downtime in accordance with 40 C.F.R. Part 60, Section 60.7(c).

**4. Kiln Ammonia Injection Monitoring System**

31. Within 10 Days following the installation of the SNCR on the Xenia Kiln Main Stack, and continuing thereafter, the CEMEX Companies shall install and operate at all times during Xenia Kiln Operation a monitoring system to continuously measure the ammonia injection rate of the SNCR system. This monitoring system must be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations. The injection rate will be measured in volumetric flow and converted to pounds per hour as 100% ammonia. The amount of ammonia shall be recorded with the $NO_x$ CEMS data in the data acquisition handling system.

**B. $SO_2$ Control Technology, Emission Limitations, and Monitoring Requirements**

**1. $SO_2$ Control Technology Requirements and Emission Limitations**

32. The CEMEX Companies shall install and commence Continuous Operation of LSA to reduce $SO_2$ emissions at the Alkali Bypass Stack at the Xenia Kiln by no later than 180 Days after the Effective Date of the Consent Decree.

33. Beginning on 210 Days after the Effective Date, and continuing thereafter, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.1 lb $SO_2$/Ton of clinker at the Xenia Kiln.

**2. $SO_2$ Continuous Emission Monitoring System**

34. Within 150 Days of the Date of Lodging of the Consent Decree, and continuing

thereafter, the CEMEX Companies shall install, certify and operate $SO_2$ CEMS at both the main stack and the alkali bypass stack at the Xenia Kiln. The $SO_2$ CEMS shall meet 40 C.F.R. Part 60, Appendix B Performance Specifications 2 and 6 requirements, and shall be calibrated and maintained in accordance with 40 C.F.R. Part 60, Section 60.13 and Appendix F. The $SO_2$ CEMS shall be certified by Ohio EPA's Central Office. Certification shall be acknowledged by Ohio EPA's Central Office upon satisfactorily completing initial Performance Specification testing using 40 C.F.R. Part 60, Appendix A, Test Methods 1-4 and 6 or 6C, and submitting results for review.

35. Except as otherwise provided in 40 C.F.R. Part 60, the CEMEX Companies shall operate the $SO_2$ CEMS at all times during Xenia Kiln Operation. $SO_2$ CEMS data shall be used in calculating the 30-Day Rolling Average Emission Rate for $SO_2$ established in Section V.B.1. ($SO_2$ Control Technology Requirements and Emission Limitations).

36. For purposes of this Consent Decree, all $SO_2$ emissions shall be measured by the $SO_2$ CEMS. During any time when either of the $SO_2$ CEMS are inoperable, or otherwise not measuring and recording valid $SO_2$ emissions data, the CEMEX Companies shall use the missing data substitution procedures in 40 C.F.R. Part 75, Subpart D, and shall report the $SO_2$ CEMS downtime in accordance with 40 C.F.R. Part 60, Section 60.7(c).

## VI. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

37. Emission reductions resulting from compliance with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Non-attainment NSR and PSD programs.

38. The limitations on the generation and use of netting credits or offsets set forth in Paragraph 37 do not apply to emission reductions achieved by the CEMEX Companies at the Xenia Kiln that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions are greater than those required under this Consent Decree if they result from the CEMEX Companies' compliance with enforceable emission limitations that are more stringent than the limits imposed under this Consent Decree, applicable provisions of the Clean Air Act, and the Ohio SIP, and the emission reductions resulting from the more stringent emission limits are made "creditable" within the meaning of, and as required by, the Ohio SIP.

39. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Decree from being considered by EPA, Ohio EPA, or RAPCA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to Section 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on National Ambient Air Quality Standards, PSD increments, or air quality-related values, including visibility in a Class I area.

## VII. PERMITS

40. In any instance in which otherwise applicable law or this Consent Decree requires the CEMEX Companies to obtain a permit to construct or operate any device or pollution control technology, including all preconstruction, construction, and operating permits, the CEMEX Companies shall submit a timely and complete application to Ohio EPA and RAPCA via Ohio EPA's e-Business Center: Air Services for such permit or approval and take all other actions necessary to obtain all such permits or approvals, allowing for all legally required processing and review, including requests for additional information by the permitting or approval authority. The

CEMEX Companies may seek relief under the provisions of Section XI. (Force Majeure) of this Consent Decree for any delay in the performance of any obligation under this Consent Decree resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if the CEMEX Companies have submitted timely and complete applications and have taken all other actions necessary to obtain all such permits and responses to requests for additional information. Any failure by the CEMEX Companies to submit a timely permit application shall bar any use by the CEMEX Companies of Section XI. (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

41. Within 180 Days from either (a) the end of the $NO_x$ Demonstration Period if the CEMEX Companies do not seek to demonstrate that the Xenia Kiln could not achieve and maintain a 30-Day Rolling Average $NO_x$ Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker, or (b) EPA's notice to the CEMEX Companies pursuant to Paragraphs 25, 26, 27 or a final decision pursuant to Section XII. (Dispute Resolution) of the Decree (whichever is latest), the CEMEX Companies shall apply to the Ohio EPA and RAPCA to include the following requirements of this Consent Decree into a federally enforceable permit (other than a Title V permit) issued under the Ohio SIP (and independent of the authority to issue Title V permits): compliance with the final $NO_x$ emission limit determined pursuant to Paragraphs 21-27 and the $SO_2$ emission limit set forth in Paragraph 33, the operational requirements for the SNCR and LSA, the monitoring requirements of this Decree, and the requirements in Section VI. pertaining to the Prohibition on Netting Credits or Offsets. In lieu of incorporating these terms of the Consent Decree directly into a federally enforceable permit, the CEMEX Companies may request the State to submit the requirements of the Consent Decree to EPA for approval under the Ohio SIP in accordance with 42 U.S.C. § 7410(k).

Following submission of the application for the permit or request for SIP revision, the CEMEX Companies shall cooperate with Ohio EPA and RAPCA by promptly submitting any additional information requested following its receipt of the application for the permit or request for SIP revision.

42. Within 60 Days of issuance of a permit by the appropriate permitting authority, or in conjunction with the issuance of such permit, or upon issuance of a SIP revision, the CEMEX Companies shall file any applications necessary to incorporate the requirements of the permit or SIP revision into the Title V operating permit for the Facility.

43. The Parties agree that incorporation of the requirements of this Consent Decree into the Title V permit for the Facility shall be in accordance with the applicable federal, State or local rules or laws.

44. The CEMEX Companies shall provide EPA with a copy of each application for a permit or request for SIP revision, as well as a copy of any permit or SIP revision proposed as a result of such application or request, to allow for timely participation in any public comment opportunity.

45. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXI. (Termination) of this Consent Decree.

## VIII. REVIEW AND APPROVAL OF SUBMITTALS

46. After review of any plan, report, or other document that is required to be submitted pursuant to this Consent Decree, EPA, after consultation with the State, shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove (with explanation) the remainder; or (d) disapprove (with explanation) the submission.

47. If the submission is approved pursuant to Paragraph 46(a), the CEMEX Companies shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 46(b) or (c), the CEMEX Companies shall, upon written direction of EPA, after consultation with the State, take all actions required by the approved plan, report, or other item that EPA determines are technically severable from any disapproved portions, subject to the CEMEX Companies' right to dispute only the specified conditions or the disapproved portions, under Section XII. (Dispute Resolution) of this Decree.

48. If the submission is disapproved in whole or in part pursuant to Paragraph 46(c) or (d), the CEMEX Companies shall, subject to its right to dispute the disapproved portions pursuant to Section XII. (Dispute Resolution) of this Decree, within 45 Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, the CEMEX Companies shall proceed in accordance with the preceding Paragraph.

49. Any stipulated penalties applicable to an original submission that is disapproved in whole or in part pursuant to Paragraph 46(c) or (d), as provided in Section X. (Stipulated Penalties) of this Decree, shall continue to accrue during the 45 Day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of the CEMEX Companies' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

50. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, EPA may again require the CEMEX Companies to correct any deficiencies in accordance with the preceding Paragraphs, or may correct any deficiencies itself and seek stipulated penalties, subject to the CEMEX Companies' right to invoke Dispute Resolution under Section XII. of this Consent Decree and the right of EPA to seek stipulated penalties provided in the preceding Paragraphs.

## IX. REPORTING REQUIREMENTS

51. The CEMEX Companies shall submit the following reports: Within 30 Days after the end of each half calendar year (*i.e.*, by January 30th and July 30th) after the Effective Date, until termination of this Decree pursuant to Section XXI. (Termination), the CEMEX Companies shall submit a semi-annual report to EPA, Ohio EPA, and RAPCA as specified in Paragraph 55 for the immediately preceding half calendar year period that shall:

(a) Identify any and all dates on which the CEMEX Companies have installed, or describe the progress of installation of, the SNCR and LSA required to be installed and operated at the Xenia Kiln under Section V.A.1. ($NO_x$ Emission Reduction and Control Technology

Requirements) and Section V.B.1. ($SO_2$ Control Technology Requirements and Emission Limitations) and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;

(b) Identify any and all dates on which the CEMEX Companies have completed installation of, or describe the progress of installation of, each CEMS required under Section V.A.3. ($NO_x$ Continuous Emission Monitoring System) and Section V.B.2. ($SO_2$ Continuous Emission Monitoring System), and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions;

(c) Provide all CEMS data collected for the Xenia Kiln under Section V.A.3. ($NO_x$ Continuous Emission Monitoring System) and Section V.B.2. ($SO_2$ Continuous Emission Monitoring System);

(d) Provide all data necessary to determine compliance with Section V.A.2. ($NO_x$ Emission Limitations) and Section V.B.1. ($SO_2$ Control Technology Requirements and Emission Limitations);

(e) Provide a complete description and status of all actions the CEMEX Companies have undertaken to comply with the Appendices of this Consent Decree;

(f) Describe the status of permit applications required under this Consent Decree; and

(g) Describe the status of any operation and maintenance work relating to activities required under this Consent Decree.

The semi-annual report shall also include a description of any non-compliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps

taken (including the length of time to comply or date when compliance will be achieved), or to be taken, to prevent or minimize such violation.

52. The CEMEX Companies shall submit an Excess Emissions Report ("EER") based on CEMS data to Ohio EPA and RAPCA within 30 Days after the end of each calendar quarter (*i.e.*, by January 30th, April 30th, July 30th, and October 30th) after the Effective Date. EER data is required to be reported in a format that satisfies the requirements of 40 C.F.R. Part 60, Sections 60.7(c) and 60.13(h). All EERs must include the date, time of commencement and completion, magnitude, and reason for each time period of excess emission. EERs must provide the operating time of the Kiln, and all time periods of Kiln, control equipment, and CEMS malfunctions.

53. If the CEMEX Companies violate, or have reason to believe that they may have violated, any requirement of this Consent Decree, the CEMEX Companies shall notify the United States and the State of such violation and its likely duration, in writing, within 10 Days of the Day the CEMEX Companies first became aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. The CEMEX Companies shall investigate the cause of the violation and shall then submit an amendment to the report required under this Paragraph, including a full explanation of the cause of the violation, within 30 Days of the Day the CEMEX Companies become aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves the CEMEX Companies of their obligation to provide the notice required by Section XI. (Force Majeure) of this Consent Decree if the CEMEX Companies contend a Force Majeure event occurred.

54. Whenever any violation of this Consent Decree, or of any applicable permits required under this Consent Decree, or any other event affecting the CEMEX Companies' performance under

this Decree, or the performance of the Facility, may pose an immediate threat to the public health or welfare or the environment, the CEMEX Companies shall notify EPA, Ohio EPA, and RAPCA orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after the CEMEX Companies first knew, or should have known, of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

55. All reports shall be submitted to the persons designated in Section XVI. (Notices) of this Consent Decree.

56. Each report submitted by the CEMEX Companies under this Section shall be signed by an official of the submitting party and include the following certification:

> I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

57. The reporting requirements of this Consent Decree do not relieve the CEMEX Companies of any reporting obligations required by the Clean Air Act or implementing regulations, or by any other federal, State, or local law, regulation, permit, or other requirement.

58. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted

by law.

## X. STIPULATED PENALTIES

59. The CEMEX Companies shall be liable for stipulated penalties to the United States and the State for violations of this Consent Decree as specified in Table 1 below, unless excused under Section XI. (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree. Payment of any stipulated penalty amount shall be made 50% to the United States and 50% to the State.

**TABLE 1**

| CONSENT DECREE VIOLATIONS | STIPULATED PENALTY |
|---|---|
| Failure to pay the civil penalty as specified in Section IV. (Civil Penalty) of this Consent Decree | $5,000 for each Day |
| Failure to comply with any 30-Day Rolling Average Emission Rate limitation for $NO_x$ or $SO_2$, where the emissions are less than 5% in excess of the limits set forth in this Consent Decree | $1,500 for each Operating Day during any 30-Day Rolling Period where the violation is less than 5% in excess of the limitation |
| Failure to comply with any 30-Day Rolling Average Emission Rate limitation for $NO_x$ or $SO_2$, where the emissions are equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree | $3,000 for each Operating Day during any 30-Day Rolling Period where the violation is equal to or greater than 5% but less than 10% in excess of the limitation |
| Failure to comply with a 30-Day Rolling Average Emission Rate limitation for $NO_x$ or $SO_2$, where the emissions are equal to or greater than 10% in excess of the limits set forth in this Consent Decree | $5,000 for each Operating Day during any 30-Day Rolling Period where the violation is equal to or greater than 10% in excess of the limitation |

| CONSENT DECREE VIOLATIONS | STIPULATED PENALTY |
|---|---|
| Failure to timely install or Commence Continuous Operation or Continuously Operate SNCR or LSA, as required in Paragraphs 14 and 32 at the Xenia Kiln | $5,000 for each Day during the first 20 Days, $10,000 for each Day for the next 40 Days, and $37,500 for each consecutive Day thereafter |
| Failure to timely apply for any permit or permit amendment required by Section VII. (Permits) | $1,000 for each Day for each such failure |
| Failure to install or operate a CEMS in conformance with the requirements of Section V.A.3. ($NO_x$ Continuous Emission Monitoring System) or Section V.B.2. ($SO_2$ Continuous Emission Monitoring System), as applicable | $1,000 for each Day for each such failure |
| Failure to install or operate a Kiln System Ammonia Injection Monitoring System in conformance with the requirements of Section V.A.4. (Kiln System Ammonia Injection Monitoring System) | $1,000 for each Day for each such failure |
| Failure to timely complete the $NO_x$ Demonstration Period as required by Paragraphs 17-18 | $1,000 for each Day during the first 20 Days, $2,500 for each Day for the next 40 Days, and $5,000 for each Day thereafter |
| Failure to timely submit, modify, or implement, as approved, any of the following: (1) the $NO_x$ Emission Reduction Report required by Paragraph 11 and Appendix A; (2) the Optimization Report required by Paragraph 15 and Appendix B; or (3) the $NO_x$ Demonstration Period Final Report required by Paragraph 22. | $1,000 for each Day during the first 20 Days, $2,500 for each Day for the next 40 Days, and $5,000 for each Day thereafter |
| Failure to timely submit, modify, or implement, as approved, any report, plan, study, analysis, protocol, or other submittal required by this Consent Decree other than those identified in this table | $750 for each Day during the first 10 Days, $1,000 for each Day thereafter |
| Any other violation of this Consent Decree | $1,000 for each Day for each violation |

60. Stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

61. Violations of any limit based on a 30-Day rolling average constitutes 30 Days of violation but where such a violation (for the same pollutant from the Xenia Kiln) recurs within periods less than 30 Days, the CEMEX Companies shall not be obligated to pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.

62. The CEMEX Companies shall pay any stipulated penalty within 30 Days of receiving the United States' demand.

63. The United States may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due the United States under this Consent Decree. The State may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due the State under this Consent Decree.

64. Stipulated penalties shall continue to accrue as provided in this Section, during any Dispute Resolution, but need not be paid until the following:

(a) If the dispute is resolved by agreement or by a decision of EPA, after consultation with the State, that is not appealed to the Court, the CEMEX Companies shall pay accrued penalties determined to be owing, together with interest in accordance with Paragraph 67 within 30 Days of the effective date of the agreement or the receipt of EPA's decision or order.

(b) If the dispute is appealed to the Court and the United States prevails in whole or in part, the CEMEX Companies shall pay all accrued penalties determined by the Court to be

owing, together with interest in accordance with Paragraph 67, within 60 Days of receiving the Court's decision or order, except as provided in Subparagraph (c), below;

(c) If any Party appeals the District Court's decision, the CEMEX Companies shall pay all accrued penalties determined to be owing, together with interest in accordance with Paragraph 67, within 15 Days of receiving the final appellate court decision.

65. The CEMEX Companies shall pay stipulated penalties owing to the United States in the manner set forth in, and with the confirmation notices required by, Paragraph 8, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid. The CEMEX Companies shall pay stipulated penalties owing to the State by delivering a certified check to Karen Pierson or her successor, Paralegal, Office of the Attorney General of Ohio, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, payable to the order of "Treasurer, State of Ohio." The memorandum portion of the State's check, or some other prominent location on the transmittal letter or documentation accompanying the State's check, shall include a reference to "A.G. EAGO No. 404460."

66. The CEMEX Companies shall not deduct stipulated penalties paid under this Section in calculating their federal or state or local income tax.

67. If the CEMEX Companies fail to pay stipulated penalties according to the terms of this Consent Decree, the CEMEX Companies shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be construed to limit the United States from securing any remedy otherwise provided by law for the CEMEX Companies' failure to pay any stipulated penalties.

68. Subject to the provisions of Section XIV. (Effect of Settlement/Reservation of Rights) of this Consent Decree, the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or the State for the CEMEX Companies' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of any applicable statute or regulation, the CEMEX Companies shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

## XI. FORCE MAJEURE

69. "Force Majeure," for purposes of this Consent Decree, is defined as any event, including events qualifying as Force Majeure under Paragraph 40, arising from causes beyond the control of the CEMEX Companies, of any entity controlled by the CEMEX Companies, or of the CEMEX Companies' Contractors, that delays or prevents the performance of any obligation under this Decree despite the CEMEX Companies' best efforts to fulfill the obligation. The requirement that the CEMEX Companies exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential Force Majeure event and best efforts to address the effects of any such event (a) as it is occurring, and (b) after it has occurred to prevent or minimize any resulting delay and any adverse environmental effects of the delay, to the greatest extent possible. "Force Majeure" does not include the CEMEX Companies' financial inability to perform any obligation under this Consent Decree.

70. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a Force Majeure event, the CEMEX Companies shall provide notice orally or by electronic or facsimile transmission to the persons required to

receive notice pursuant to Section XVI. (Notices) for EPA and the State, within 5 Business Days of when the CEMEX Companies first knew that the event might cause a delay. Within 10 Business Days thereafter, the CEMEX Companies shall provide in writing to EPA and the State an explanation and description of: the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay and any adverse environmental effects of the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effects of the delay including measures to address any adverse environmental effects; the CEMEX Companies' rationale for attributing such delay to a Force Majeure event if they intend to assert such a claim; and a statement as to whether, in the opinion of the CEMEX Companies, such event may cause or contribute to an endangerment to public health, welfare, or the environment. The CEMEX Companies shall include with any written notice all available documentation supporting the claim that the delay was attributable to a Force Majeure. Failure to comply with the above requirements shall preclude the CEMEX Companies from asserting any claim of Force Majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. The CEMEX Companies shall be deemed to know of any circumstance of which the CEMEX Companies, any entity controlled by the CEMEX companies, or a CEMEX Companies' Contractor(s) knew or should have known.

71. If EPA, after a reasonable opportunity for review and comment by the State, agrees that the delay or anticipated delay is attributable to a Force Majeure event, the time for performance of the obligations under this Consent Decree that are affected by the Force Majeure event will be extended by EPA, after a reasonable opportunity for review and comment by the State, for such time as is necessary to complete those obligations. An extension of the time for performance of the

obligations affected by the Force Majeure event shall not, of itself, extend the time for performance of any other obligation. EPA will notify the CEMEX Companies in writing of the length of the extension, if any, for performance of the obligations affected by the Force Majeure event.

72. If EPA, after a reasonable opportunity for review and comment by the State, does not agree that the delay or anticipated delay has been or will be caused by a Force Majeure event, EPA will notify the CEMEX Companies in writing of its decision.

73. If the CEMEX Companies elect to invoke the dispute resolution procedures set forth in Section XII. (Dispute Resolution), they shall do so no later than 15 Days after receipt of EPA's written notice. In any such proceeding, the CEMEX Companies shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a Force Majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that the CEMEX Companies complied with the requirements of Paragraphs 69 and 70, above. If the CEMEX Companies carry this burden, the delay at issue shall be deemed not to be a violation by the CEMEX Companies of the affected obligation of this Consent Decree identified to EPA and the Court.

## XII. DISPUTE RESOLUTION

74. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. The CEMEX Companies' failure to seek resolution of a dispute under this Section shall preclude the CEMEX Companies from raising any such issue as a defense to an action by the United States to enforce any obligation of the CEMEX Companies arising under this

Decree.

75. Informal Dispute Resolution. Any dispute subject to dispute resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when the CEMEX Companies send the United States a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed 20 Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States shall be considered binding unless, within 20 Days after the conclusion of the informal negotiation period, the CEMEX Companies invoke formal dispute resolution procedures as set forth below.

76. Formal Dispute Resolution. The CEMEX Companies shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but may not necessarily be limited to, any factual data, analysis, or opinion supporting the CEMEX Companies' position and any supporting documentation relied upon by the CEMEX Companies.

77. The United States shall serve its Statement of Position within 45 Days of receipt of the CEMEX Companies' Statement of Position. The United States' Statement of Position shall include, but may not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The Statement of Position of the United States shall be binding on the CEMEX Companies, unless the CEMEX Companies file a motion for judicial review of the dispute in accordance with the following Paragraph.

78. The CEMEX Companies may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XVI. (Notices) of this Consent Decree, a motion requesting judicial resolution of the dispute. The motion must be filed within 15 Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of the CEMEX Companies' position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

79. The United States shall respond to the CEMEX Companies' motion within the time period allowed by the Local Rules of this Court. Defendant may file a reply memorandum, to the extent permitted by the Local Rules.

80. Standard of Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 76 (Formal Dispute Resolution), the CEMEX Companies shall bear the burden of demonstrating that its position complies with this Consent Decree and that it is entitled to relief under applicable principles of law. The United States reserves the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law, and the CEMEX Companies reserve the right to oppose this position.

81. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of the CEMEX Companies under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment

shall be stayed pending resolution of the dispute as provided in Paragraph 64. If the CEMEX Companies do not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section X. (Stipulated Penalties).

## XIII. INFORMATION COLLECTION AND RETENTION

82. Any authorized representative of the United States and the State, including their attorneys, contractors, and consultants, shall have the right of entry into the Facility, at all reasonable times, upon presentation of credentials, to:

(a) monitor the progress of activities required under this Consent Decree;

(b) verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;

(c) obtain samples and, upon request, splits of any samples taken by the CEMEX Companies or their representatives, Contractors, or consultants;

(d) obtain copies of any documents, including photographs and similar data; and

(e) assess the CEMEX Companies' compliance with this Consent Decree.

83. Until five years after the termination of this Consent Decree, the CEMEX Companies shall retain, and shall instruct their Contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in their or their Contractors' or agents' possession or control, or that come into their or their Contractors' or agents' possession or control, and that relate in any manner to the CEMEX Companies' performance of their obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United States, the CEMEX

Companies shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

84. The CEMEX Companies shall also retain all existing information described in paragraph 9 of Appendix A, for the 5-year period prior to the Effective Date of this Consent Decree. Such information will be used by EPA to determine the validity of a proposed Alternative $NO_x$ Emission Limit if the CEMEX Companies propose such a limit pursuant to Appendix C.

85. At the conclusion of the information-retention period provided in Paragraphs 83 and 84, the CEMEX Companies shall notify the United States and the State at least 90 Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraphs 83 and 84 and, upon request by the United States or the State, the CEMEX Companies shall deliver any such documents, records, or other information to EPA or the State. The CEMEX Companies may assert that certain documents, records, or other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the CEMEX Companies assert such a privilege, they shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by the CEMEX Companies. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

86. The CEMEX Companies may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2.

As to any information that the CEMEX Companies seek to protect as CBI, the CEMEX Companies shall follow the procedures set forth in 40 C.F.R. Part 2 but agree to permit the United States to share and discuss such information with the State.

87. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State pursuant to applicable laws, regulations, or permits, nor does it limit or affect any duty or obligation of the CEMEX Companies to maintain documents, records, or other information imposed by applicable federal or State laws, regulations, or permits.

## XIV. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

88. This Consent Decree resolves the civil claims of the United States and the State against the CEMEX Companies for the violations alleged in the Complaint and Complaint in Intervention filed in this action through the Date of Lodging.

89. The United States and the State reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 88. This Consent Decree shall not be construed to limit the rights of the United States or the State to obtain penalties or injunctive relief under the Act or implementing regulations, or under other federal or state laws, regulations, or permit conditions, except as expressly specified in Paragraph 88. The United States and the State further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Facility, whether related to the violations addressed in this Consent Decree or otherwise.

90. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, civil penalties, other appropriate relief relating to the Facility or the

CEMEX Companies, the CEMEX Companies shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 88 of this Section.

91. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. The CEMEX Companies are responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and the CEMEX Companies' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the State do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that the CEMEX Companies' compliance with any aspect of this Consent Decree will result in compliance with provisions of the Clean Air Act, 42 U.S.C. § 7401 *et seq.*, or with any other provisions of federal, State, or local laws, regulations, or permits.

92. This Consent Decree does not limit or affect the rights of the CEMEX Companies or of the United States or the State against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against the CEMEX Companies, except as otherwise provided by law.

93. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

## XV. COSTS

94. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the State shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalties or stipulated penalties due but not paid by the CEMEX Companies.

## XVI. NOTICES

95. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to EPA:

(If by first class mail)
Director, Air Enforcement Division
U.S. Environmental Protection Agency
MC 2242A
1200 Pennsylvania Ave. NW
Washington, D.C. 20460
Fax: (202) 564-0015

(If by commercial delivery service)
Director, Air Enforcement Division
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Ariel Rios South Building, Room 1119
Washington, D.C. 20004

Versia Boyd
Attention: Compliance Tracker
Air and Radiation Division
U.S. Environmental Protection Agency, Region 5
Mail Code AE-17J
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

Terence Stanuch
Associate Regional Counsel
U.S. Environmental Protection Agency, Region 5
Mail Code C-14J
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

As to the United States – to the EPA addressees above and to:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-08990

As to the State of Ohio:

Ohio Environmental Protection Agency
Division of Air Pollution Control
Attn: James Orlemann
Assistant Chief, SIP Development & Enforcement
Lazarus Government Center, Suite 700
50 West Town Street
Columbus, Ohio 43215

As to the Regional Air Pollution Control Agency:

John Paul, Administrator
RAPCA
Reibold Building
117 South Main St.
Dayton, OH 45422-1280

and

As to the CEMEX Companies:

Leslie S. White
Executive Vice President and General Counsel
CEMEX, Inc.
920 Memorial City Way, Suite 100
Houston, TX 77024

96. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

97. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

## XVII. EFFECTIVE DATE

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

## XVIII. RETENTION OF JURISDICTION

99. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections XII. (Dispute Resolution) and XIX. (Modification), or effectuating or enforcing compliance with the terms of this Decree.

## XIX. MODIFICATION

100. The terms of this Consent Decree, including any attached appendices, may be modified only by a subsequent written agreement signed by all the Parties. Where the modification constitutes a material change to this Consent Decree, it shall be effective only upon approval by the Court.

101. Any disputes concerning modification of this Consent Decree shall be resolved pursuant to Section XII. (Dispute Resolution) of this Decree, provided, however, that, instead of the burden of proof provided by Paragraph 80, the Party seeking the modification bears the burden of

demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

## XX. GENERAL PROVISIONS

102. At any time prior to termination of this Consent Decree, the CEMEX Companies may request approval from EPA to implement an alternative pollution control technology for $NO_x$ or $SO_2$ than what is required by this Consent Decree. In seeking such approval, the CEMEX Companies must demonstrate to EPA that such alternative pollution control technology will: (a) for $NO_x$, achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker or achieve and maintain an emission rate that is more stringent than the final $NO_x$ emission limit determined in accordance with Paragraphs 21-27; and (b) for $SO_2$, achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.1 lb $SO_2$/Ton of clinker. Approval of such a request is solely at EPA's discretion, except that EPA, in the case of $SO_2$, shall approve an alternative control technology that the CEMEX Companies install to meet hydrochloric acid emission limits established by the National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry that also achieves and maintains a 30-Day Rolling Average Emission Rate of no greater than 1.1 lb $SO_2$/Ton of clinker. If EPA, after a reasonable opportunity for review and comment by the State, approves such a request, nothing in this Paragraph shall relieve the CEMEX Companies from complying with any other requirement of this Consent Decree applicable to the Xenia Kiln, including any requirements regarding the Continuous Operation of pollution control technology at the Xenia Kiln.

103. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to

the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

104. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.

105. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an emission rate limit of 1.85 is not met if the actual emission rate is 1.86. The CEMEX Companies shall round the third significant digit to the nearest second significant digit. For example, if an actual emission rate is 1.854, that shall be reported as 1.85, and shall be in compliance with an emission rate limit of 1.85; and if an actual emission rate is 1.855, that shall be reported as 1.86, and shall not be in compliance with an emission rate limit of 1.85. The CEMEX Companies shall report data to the number of significant digits in which the standard or limit is expressed.

## XXI. TERMINATION

106. After the CEMEX Companies have satisfied the requirements of Sections V.A. ($NO_x$ Emission Reduction, Control Technology, Emission Limitations and Monitoring Requirements), V.B. ($SO_2$ Control Technology, Emission Limitations and Monitoring Requirements), have obtained all permits (or, where applicable, SIP revisions) referenced in Section VII. (Permits) of this Decree and have maintained operation of the SNCR and LSA as required by this Consent Decree for a period of 2 years after determination of the final $NO_x$ emission limit in accordance with Paragraphs 21-27 of this Consent Decree (including any period required for Dispute Resolution), have fulfilled all other requirements of this Consent Decree, and have paid the civil penalty and any accrued

stipulated penalties as required by this Consent Decree, the CEMEX Companies may serve upon the United States and the State a Request for Termination, stating that the CEMEX Companies have satisfied those requirements, together with all necessary supporting documentation.

107. Following receipt by the United States and the State of the CEMEX Companies' Request for Termination, the Parties shall confer informally concerning the Request and any disagreement that the Parties may have as to whether the CEMEX Companies have satisfactorily complied with the requirements for termination of this Consent Decree. If the United States, after consultation with the State, agrees that the Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Decree.

108. If the United States, after consultation with the State, does not agree that the Decree may be terminated, the CEMEX Companies may invoke Dispute Resolution under Section XII. (Dispute Resolution) of this Decree. However, the CEMEX Companies shall not seek Dispute Resolution of any dispute regarding termination under Paragraph 76 (Formal Dispute Resolution) of Section XII. (Dispute Resolution) of this Consent Decree until 60 Days after service of its Request for Termination.

## XXII. PUBLIC PARTICIPATION

109. This Consent Decree shall be lodged with the Court for a period of not less than 30 Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Decree is inappropriate, improper, or inadequate. The CEMEX Companies consent to entry of this Consent Decree without further notice and agree not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any

provision of the Decree, unless the United States has notified the CEMEX Companies in writing that it no longer supports entry of the Decree.

## XXIII. SIGNATORIES/SERVICE

110. Each undersigned representative of the CEMEX Companies and the State and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Decree and to execute and legally bind the Party he or she represents to this document.

111. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. The CEMEX Companies agree to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. The CEMEX Companies shall identify, on the attached signature page, the name, address and telephone number of an agent who is authorized to accept service of process by mail on behalf of the CEMEX Companies with respect to all matters arising under or relating to this Consent Decree. All Parties agree that the CEMEX Companies need not file an answer to the Complaint in this action unless or until the Court expressly declines to enter this Consent Decree.

## XXIV. INTEGRATION

112. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than deliverables that are subsequently submitted and approved

pursuant to this Decree, no other document, nor any representation, inducement, agreement, understanding or promise constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

## XXV. FINAL JUDGMENT

113. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and the CEMEX Companies. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

## XXVI. APPENDICES

114. The following appendices are attached to and part of this Consent Decree:

"Appendix A" $NO_x$ Emission Reduction Study;

"Appendix B" SNCR Design and Optimization; and

"Appendix C" $NO_x$ Demonstration Period Requirements.

Dated and entered this ____ day of _____, _____.

_____
UNITED STATES DISTRICT COURT JUDGE
Southern District of Ohio

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR THE UNITED STATES OF AMERICA

Ignacia S. Moreno

Date: 1/16/11

IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

Date: 1/18/11

LAURA A. THOMS
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 305-0260 (Tel.)
(202) 514-8395 (Fax)
laura.thoms@usdoj.gov

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR THE UNITED STATES OF AMERICA

_____ Date: _____

PATRICK QUINN (0022602)
Assistant United States Attorney
United States Attorney's Office
Southern District of Ohio
Room 602, Federal Building
200 W. 2d Street
Dayton, Ohio 45402
(937) 225-2910 (Tel.)
(937) 225-2564 (Fax)
patrick.quinn@usdoj.gov

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Cynthia Giles

Date: 1/3/11

CYNTHIA GILES
Assistant Administrator
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

Date: 12/22/10

ADAM M. KUSHNER
Director, Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United State Environmental Protection Agency

Date: 12/20/10

PHILLIP A. BROOKS
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

Date: DEC. 20, 2010

APPLE CHAPMAN
ILANA SALTZBART
Attorney, Air Enforcement Division
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: 12/29/10

SUSAN HEDMAN
Regional Administrator
United States Environmental Protection Agency
Region 5 (Mail Code R-19J)
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

Date: 12/21/10

TERENCE STANUCH
Associate Regional Counsel
United States Environmental Protection Agency
Region 5 (Mail Code C-14J)
77 West Jackson Blvd.
Chicago, Illinois 60604-3590

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR THE STATE OF OHIO:

MICHAEL DEWINE
Ohio Attorney General

Date: 2/8/11

GARY L. PASHEILICH
Assistant Attorney General
Environmental Enforcement Section
Ohio Attorney General's Office
30 E. Broad St., 25th Floor
Columbus, Ohio 43215-3400

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR CEMEX, INC.:

Date: Dec. 20, 2010

LESLIE S. WHITE
Executive Vice President and General Counsel
CEMEX, Inc.

The following is the name and address of Defendant CEMEX, Inc.'s agent for service pursuant to Paragraph 111.

Chet M. Thompson
Crowell & Moring LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004-2595
(202) 624-2655

Signature Page for *United States of America, et al. v. CEMEX, Inc, et al.* Consent Decree

FOR CEMEX Construction Materials Atlantic, LLC:

Leslie S. White

Date: Dec. 20, 2010

LESLIE S. WHITE
Executive Vice President and General Counsel
CEMEX, Inc.

The following is the name and address of Defendant CEMEX Construction Materials Atlantic, LLC's agent for service pursuant to Paragraph 111.

Chet M. Thompson
Crowell & Moring LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004-2595
(202) 624-2655

# Consent Decree Appendix A
# $NO_x$ Emission Reduction Study

**CONSENT DECREE APPENDIX A**
**$NO_x$ Emission Reduction Study**

## I. Scope and Applicability

1. Prior to the required installation and operation of the SNCR on the Xenia Kiln Main Stack to reduce $NO_x$ emissions pursuant to the Consent Decree, the CEMEX Companies shall comply with this Appendix in proposing and obtaining EPA approval for additional measures that can be implemented to reduce $NO_x$ emissions from the Xenia Kiln. Such measures shall include process and/or operational changes as further described in Section IV. of this Appendix.

2. For purposes of this Appendix, "process and/or operational changes" do not include rebuilding or reconstructing (within the meaning of 40 C.F.R. Part 60) the Kiln or installing selective catalytic reduction.

3. Supporting data required to be submitted under this Appendix A may contain information relative to Kiln operation and production that the CEMEX Companies may consider to be proprietary. In such a situation, the CEMEX Companies may submit the information to EPA as "Confidential Business Information," subject to the provisions of 40 C.F.R. Part 2, but agree to permit the United States to share and discuss such information with the Ohio EPA and RAPCA.

## II. CEMS Installation and Operation

4. The CEMEX Companies shall install and thereafter operate CEMS to monitor and record the $NO_x$ emissions at the Kiln, in accordance with the requirements of the Consent Decree specified in Section V.A.3. ($NO_x$ Continuous Emission Monitoring System).

## III. Baseline Data Collection

5. The CEMEX Companies shall use CEMS to collect emissions data for $NO_x$ from the Kiln. The CEMEX Companies shall also install and operate equipment necessary to monitor and collect operational data as discussed in paragraph 9 of this Appendix.

6. The period of baseline data collection shall last for a minimum of 60 Days and shall start no later than 150 Days from Date of Lodging of the Consent Decree.

7. The baseline data collection period will be undertaken during a time period representative of normal Kiln Operation.

8. During the baseline data collection period, the CEMEX Companies shall operate the Xenia Kiln in a manner necessary to produce a quality cement clinker product. The CEMEX Companies shall not be expected to operate the Kiln within normal operating parameters during periods of Kiln

Malfunction, Startup, or Shut Down.

9. As part of the $NO_x$ Emission Reduction Study required pursuant to Paragraph 11 of the Consent Decree, the CEMEX Companies shall collect baseline data that will include the following information either derived from available direct monitoring or estimated from monitored or measured data:

a. Kiln flue gas temperature at the inlet to the PM control device(s) for the main stack and the alkali bypass stack at the Xenia Kiln (daily average);

b. Kiln production rate in tons of clinker (daily total);

c. Raw material feed rate in tons (daily total);

d. Type and percentage of each raw material used and the total feed rate (daily);

e. $O_2$, $NO_x$, ammonia, and $SO_2$ concentrations (dry basis) and mass rates for the Kiln (daily average for concentrations and daily totals for mass rates) as measured by the CEMs;

f. Flue gas volumetric flow rate (daily average in dscfm and acfm);

g. Feed burnability (at least once at the beginning and once at the end of the baseline data collection period) using tricalcium silicate as the relative index;

h. Temperatures measured in or near the burning zone;

i. Kiln fuel feed rate and type of fuel by weight or heat input rate (calculated to a daily average);

j. Fuel distribution, if fuel is injected at more than one location, how much is injected at each location (daily average);

k. Primary and secondary air rates (daily average);

l. Documentation of any Startup, Shut Down, or Malfunction events and resulting emissions; and

m. An explanation of any gaps in the data, estimated data or missing data.

## IV. <u>$NO_x$ Emission Reduction Investigation and Analysis</u>

10. By no later than 150 Days after the Date of Lodging of the Consent Decree, the CEMEX

Companies shall commence a $NO_x$ emission reduction investigation and analysis of all potential process and/or operational changes that can be implemented at the Facility to reduce emissions of $NO_x$ prior to the application of the SNCR ("$NO_x$ Emission Reduction Study").

11. The $NO_x$ Emission Reduction Study shall:

    a. identify all potential process and/or operational changes that can be implemented to reduce emissions of $NO_x$ prior to the application of SNCR on the Main Stack of the Xenia Kiln;

    b. estimate the amount of $NO_x$ emission reductions that can be obtained through implementation of each of the individual process and/or operational changes;

    c. analyze which potential process and/operational changes are appropriate for implementation;

    d. analyze which potential process and/or operational changes are inappropriate for implementation;

    e. determine the appropriate period of time for implementing those process and/or operational changes that are appropriate for implementation; and

    f. estimate the amount of $NO_x$ emissions that can be reduced through all of the individual process and/or operational changes that are appropriate for implementation.

12. At a minimum, the $NO_x$ Emission Reduction Study must address:

    a. adjustments to the combustion zone temperature to minimize $NO_x$ formation;

    b. optimization of air flow and oxygen levels;

    c. improvement of fuel efficiency;

    d. changes to the raw materials;

    e. enhancements to the existing low- $NO_x$ burner system;

    f. modifications to the kiln including, but not limited to, introduction of air at different locations in the kiln to create reducing zones for $NO_x$ reduction and adjustments to the primary air; and

    g. fuel changes, including changes to the fuel delivery system.

## V. $NO_x$ Emission Reduction Report

13. By no later than 270 Days following the Date of Lodging or 30 Days following the Effective Date of the Consent Decree, whichever is later, the CEMEX Companies shall submit to EPA for review and approval pursuant to Section VIII. (Review and Approval of Submittals) a $NO_x$ Emission Reduction Report which shall be developed as a result of the $NO_x$ Emission Reduction Study.

14. The $NO_x$ Emission Reduction Report shall address all of the items included in paragraphs 11 and 12 of this Appendix.

15. The $NO_x$ Emission Reduction Report shall recommend the process and/or operational changes to be implemented as measures to reduce $NO_x$ emissions from the Kiln and include a detailed analysis of why such changes are proposed and, if applicable, why any changes identified through the Emission Reduction Investigation are not proposed to be implemented. The $NO_x$ Emission Reduction Report shall also include a proposed implementation schedule for the proposed measures.

16. The baseline data required by paragraph 9 of this Appendix shall be submitted to EPA and Ohio EPA/RAPCA in an electronic format and the CEMEX Companies shall explain the reasons for any data not collected for each parameter listed in paragraph 9 of this Appendix. The CEMEX Companies shall report all data in a format consistent with and able to be manipulated by Microsoft Excel.

# Consent Decree Appendix B
# SNCR Design and Optimization

**CEMEX CONSENT DECREE APPENDIX B**
**SNCR Design and Optimization**

## I. Scope and Applicability

1. The CEMEX Companies shall comply with this Appendix B to design and optimize the SNCR as required by Paragraphs 13-15 of the Consent Decree.

2. Information required to be submitted under this Appendix may include information that the CEMEX Companies may consider to be proprietary. In such a situation, the CEMEX Companies may submit the information to EPA as "Confidential Business Information," subject to the provisions of 40 C.F.R. Part 2, but agree to permit the United States to share and discuss such information with the Ohio EPA and RAPCA as necessary to implement and enforce this Consent Decree.

## II. SNCR Design

3. The CEMEX Companies shall design, or contract with a Contractor to design, the SNCR to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker or, pursuant to Paragraph 13 of the Consent Decree, design the SNCR to achieve the greatest possible $NO_x$ emission reductions from the Kiln Main Stack.

4. If the SNCR is not designed to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$ /Ton of clinker from the Xenia Kiln, the CEMEX Companies shall submit an SNCR Design Report to EPA for review and approval pursuant to Section VIII. (Review and Approval of Submittals) and shall include any vendor guarantees and supporting documentation.

5. In order to achieve the greatest emission reductions of $NO_x$ from the Kiln as possible, at a minimum, the SNCR system shall be designed to deliver the proposed reagent to the exhaust gases of the Main Stack at a rate 20% greater than the mass quantity of pollutant estimated to be present in the exhaust gases (*e.g.*, 1.2 reagent:$NO_x$ molar ratio) with an excess ammonia concentration of at least 5 ppm. The system must be designed to deliver ammonia within the optimum temperature window with consideration of different operating scenarios expected for the Kiln. If necessary, multiple sets of nozzles shall be installed to accommodate the different operating scenarios.

6. The CEMEX Companies shall justify in the Design Report the reagent(s) selected, the location selected for reagent injection and other design parameters based on maximum emission reduction effectiveness, good engineering judgment, vendor standards, and available data.

## III. SNCR Installation and Optimization

7. The CEMEX Companies shall install the SNCR to reduce $NO_x$ emissions from the Xenia Kiln Main Stack in accordance with the requirements of the Consent Decree at Paragraphs 13-15.

8. The CEMEX Companies shall install an Ammonia Analyzer in the Main Stack at the Xenia Kiln in conjunction with the installation of the $NO_x$ CEMS. The Ammonia Analyzer shall be operated whenever the $NO_x$ CEMS is used to record baseline ammonia data prior to the installation of the SNCR. The Ammonia Analyzer shall also be operated during the entire $NO_x$ Demonstration Period. "Ammonia Analyzer" shall mean, for obligations involving ammonia under this Consent Decree, the total equipment and software required to sample, analyze, and to provide a record of ammonia emissions rates, and the raw data necessary to support the reported emissions rates. The Ammonia Analyzer shall meet the requirements of 40 C.F.R. Part 60, Appendices B and F, including Performance Specification 6. Certification shall be acknowledged by Ohio EPA's Central Office upon satisfactorily completing initial Performance Specification testing using 40 C.F.R. Part 60, Appendix A, Test Methods 1-4 and Conditional Test Method (CTM-027), and submitting results for review.

9. The CEMEX Companies shall optimize the SNCR system to at least a 1.2 ammonia:$NO_x$ molar ratio unless there is an excess ammonia concentration greater than 25 ppm or unless excess ammonia concentrations are less than 5 ppm. "Excess ammonia concentration" emitted from the Xenia Kiln's main stack is defined as any concentration of ammonia created exclusively by the SNCR system in excess of the baseline concentration of ammonia emitted from the Xenia Kiln stack. If the CEMEX Companies determine that the optimized steady state ammonia injection rate is 1.2 times the expected $NO_x$ concentration, then the ammonia injection will be deemed to be at its optimized rate unless the "excess ammonia concentration" is less than 5 ppm. If the excess ammonia concentration is less than 5 ppm, more ammonia shall be added to achieve an excess ammonia concentration that is at least 5 ppm excluding the baseline ammonia concentration. The SNCR system shall be deemed to be optimized if the molar ratio of ammonia to $NO_x$ is at least 1.2 and the excess ammonia concentration is at least 5 ppm excluding the baseline concentration. If the Ammonia Analyzer records excess ammonia concentrations greater than 25 ppm above the baseline emission concentration rate, then the CEMEX Companies may set the ammonia injection rate at a molar ratio of less than 1.2. The optimized molar ratio will then be set to the highest level that does not exceed 25 ppm excess ammonia and abates any potential odor issues related to the ammonia injection.

10. The CEMEX Companies shall also optimize the location or locations where ammonia is injected into the Kiln. If multiple nozzles are employed, the CEMEX Companies will test different injection points to identify whether certain nozzles reduce $NO_x$ to a greater extent than others. The CEMEX Companies shall develop a steady-state protocol for operating the SNCR during the Demonstration Period that incorporates the injection rates and locations to achieve the greatest reductions of $NO_x$ from the Kiln as possible.

11. The CEMEX Companies shall submit to EPA an Optimization Report for review and approval pursuant to Section VIII. (Review and Approval of Submittals) in accordance with the schedule set forth in Paragraph 15 of the Consent Decree. The Optimization Report shall include the protocol developed and the steps taken to comply with this Appendix. The CEMEX Companies shall also include in the SNCR Optimization Report, a discussion of any problems encountered with the operation of the SNCR, and the impact, if any, the SNCR may have had on changes in $NO_x$ emissions from the Kiln. EPA shall provide comments, if any, upon the SNCR Optimization Report and supporting data. Within 30 Days of the receipt of comments, the CEMEX Companies shall respond to any comments and take any actions required by EPA that are necessary to optimize the SNCR.

# Consent Decree Appendix C
# $NO_x$ Demonstration Period Requirements

# CONSENT DECREE APPENDIX C
# $NO_x$ Demonstration Period Requirements

## I. Scope and Applicability

1. This Appendix establishes requirements applicable to the $NO_x$ Demonstration Period and to preparation of any $NO_x$ Demonstration Period Final Report, including the development of any Alternative $NO_x$ Emission Limit.

2. Supporting data required to be submitted under this Appendix may contain information relative to Kiln Operation and production that the CEMEX Companies may consider to be proprietary. In such a situation, the CEMEX Companies may submit the information to EPA as "Confidential Business Information," subject to the provisions of 40 C.F.R. Part 2, but agree to permit the United States to share and discuss such information with the State of Ohio and RAPCA as necessary to implement and enforce this Consent Decree.

3. For purposes of this Appendix, "process and/or operational changes" do not include rebuilding or reconstructing (within the meaning of 40 C.F.R. Part 60) the Kiln or installing selective catalytic reduction.

## II. $NO_x$ Demonstration Period Requirements

4. The CEMEX Companies shall operate the SNCR to reduce $NO_x$ emissions from the Xenia Kiln Main Stack during the $NO_x$ Demonstration Period as required by the Consent Decree.

5. During the $NO_x$ Demonstration Period, the CEMEX Companies shall collect the same data as required in paragraph 9 of Appendix A. Upon request, the CEMEX Companies shall provide any of the data collected as required in this paragraph to EPA, Ohio EPA, and/or RAPCA.

6. At any time during the $NO_x$ Demonstration Period, the CEMEX Companies may elect to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker and cease the $NO_x$ Demonstration Period. Upon notice to EPA of this election pursuant to Paragraph 95 of the Consent Decree, and continuing thereafter, the CEMEX Companies shall achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$ /Ton of clinker at the Kiln and will be subject to stipulated penalties for the failure to do so pursuant to Section X. (Stipulated Penalties).

## III. $NO_x$ Demonstration Period Final Report Requirements

7. If the CEMEX Companies seek to demonstrate that the Xenia Kiln could not achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker during normal source operations, then the CEMEX Companies shall submit to EPA a Notice of

Intent to Submit a $NO_x$ Demonstration Period Final Report proposing an Alternative $NO_x$ Emission Limit by no later than 25 Days after the conclusion of the $NO_x$ Demonstration Period and, thereafter, submit to EPA a $NO_x$ Demonstration Period Final Report ("Final Report"), including a proposed Alternative $NO_x$ Emission Limit, by no later than 60 Days following the end of the $NO_x$ Demonstration Period. The Final Report shall be submitted in accordance with Paragraph 22 of the Consent Decree and shall be subject to Section VIII. (Review and Approval of Submittals).

8. The CEMEX Companies bear the burden of demonstrating that the Xenia Kiln could not achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker during normal source operation and that its proposed Alternative $NO_x$ Emission Limit is the lowest emission limit that the Kiln can achieve and maintain during normal source operations on a 30-Day rolling average basis, calculated in accordance with Paragraph 6(a) of the Consent Decree. Normal source operation includes periods of kiln Startup and Shut Down.

9. As part of the Final Report, the CEMEX Companies shall submit all of the information in paragraph 9 of Appendix A for the $NO_x$ Demonstration Period as well as the same data, to the extent it is available, for the 5-year period prior to the $NO_x$ Demonstration Period that the CEMEX Companies are required to retain pursuant to Paragraph 84 of the Consent Decree.

10. If the CEMEX Companies propose an Alternative $NO_x$ Emission Limit, the CEMEX Companies shall explain in the Final Report the basis for such Alternative $NO_x$ Emission Limit as demonstrated by all available data and information collected during the $NO_x$ Demonstration Period, including during periods of Startup and Shut Down, and shall propose an Alternative $NO_x$ Emission Limit that represents the lowest emission limit that the Xenia Kiln can achieve and maintain during normal source operations on a 30-Day rolling average basis, calculated in accordance with Paragraph 6(a) of the Consent Decree, based upon all available data and information collected during the $NO_x$ Demonstration Period. The proposed Alternative $NO_x$ Emission Limit shall also reflect the Continuous Operation of the Optimized SNCR (pursuant to Paragraph 14 of the Consent Decree) and implementation of the approved $NO_x$ emission reduction measures (pursuant to Paragraphs 11 and 12 of the Consent Decree).

11. If the Kiln was able to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/ton clinker during normal source operations for 90%-98% of the Operating Days within the $NO_x$ Demonstration Period, the following additional requirements apply:

a. Before proposing an Alternative $NO_x$ Emission Limit, the CEMEX Companies shall first identify in the Final Report any additional process or operational changes that may be appropriate to be implemented at the Facility (including process or operational changes identified during the Emission Reduction Investigation that the CEMEX Companies did not implement) so that the Kiln can achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb $NO_x$/Ton of clinker or to otherwise reduce the emissions at the Xenia Kiln.

b. If the CEMEX Companies cannot identify any additional process or operational changes that are appropriate to be implemented at the Facility that would enable the Xenia Kiln to achieve and maintain a 30-Day Rolling Average Emission Rate of no greater than 1.85 lb/Ton clinker, the CEMEX Companies shall propose an Alternative $NO_x$ Emission Limit. The proposed Alternative $NO_x$ Emission Limit shall represent the lowest emission limit that the Xenia Kiln can achieve and maintain during normal source operations, after implementing any additional process or operational changes that may be appropriate to be implemented to reduce $NO_x$ emissions at the Xenia Kiln, on a 30-Day rolling average basis, calculated in accordance with Paragraph 6(a) of the Consent Decree.

c. The CEMEX Companies shall include in the Final Report a discussion regarding the process or operational changes that it considered and implemented and those that it considered but determined were not appropriate to be implemented. The Final Report shall also include a proposed implementation schedule for the proposed additional process or operational changes.