



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

11/6/2015

Certified Mail

Mr. John Miller
 CEMEX Construction Materials Atlantic, LLC
 3250 Linebaugh Rd.
 Xenia, OH 45385

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0829700165
 Permit Number: P0114934
 Permit Type: OAC Chapter 3745-31 Modification
 County: Greene

No	TOXIC REVIEW
Yes	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
Yes	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

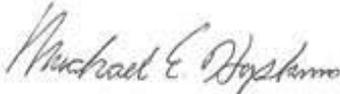
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA
RAPCA; Indiana; Kentucky



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
CEMEX Construction Materials Atlantic, LLC**

Facility ID: 0829700165
Permit Number: P0114934
Permit Type: OAC Chapter 3745-31 Modification
Issued: 11/6/2015
Effective: 11/6/2015



Division of Air Pollution Control
Permit-to-Install
for
CEMEX Construction Materials Atlantic, LLC

Table of Contents

Authorization	1
A. Standard Terms and Conditions	3
1. Federally Enforceable Standard Terms and Conditions	4
2. Severability Clause	4
3. General Requirements	4
4. Monitoring and Related Record Keeping and Reporting Requirements.....	5
5. Scheduled Maintenance/Malfunction Reporting	6
6. Compliance Requirements	6
7. Best Available Technology	7
8. Air Pollution Nuisance	8
9. Reporting Requirements	8
10. Applicability	8
11. Construction of New Sources(s) and Authorization to Install	8
12. Permit-To-Operate Application	9
13. Construction Compliance Certification	10
14. Public Disclosure	10
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations	10
16. Fees.....	10
17. Permit Transfers	10
18. Risk Management Plans	10
19. Title IV Provisions	10
B. Facility-Wide Terms and Conditions.....	11
C. Emissions Unit Terms and Conditions	13
1. P003, Clinker Production (Quarry Plant)	14



Final Permit-to-Install
CEMEX Construction Materials Atlantic, LLC
Permit Number: P0114934
Facility ID: 0829700165
Effective Date: 11/6/2015

Authorization

Facility ID: 0829700165
Facility Description: cement, hydraulic
Application Number(s): A0046623
Permit Number: P0114934
Permit Description: Chapter 31 modification permit to include the requirements of a federal consent decree in federally enforceable permit other than a Title V permit.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: \$1,250.00
Issue Date: 11/6/2015
Effective Date: 11/6/2015

This document constitutes issuance to:

CEMEX Construction Materials Atlantic, LLC
3250 Linebaugh Road
Xenia, OH 45385

of a Permit-to-Install for the emissions unit(s) identified on the following page.

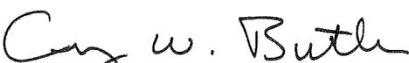
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install
CEMEX Construction Materials Atlantic, LLC
Permit Number: P0114934
Facility ID: 0829700165
Effective Date: 11/6/2015

Authorization (continued)

Permit Number: P0114934

Permit Description: Chapter 31 modification permit to include the requirements of a federal consent decree in federally enforceable permit other than a Title V permit.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P003
Company Equipment ID:	Clinker Production (Quarry Plant)
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
CEMEX Construction Materials Atlantic, LLC
Permit Number: P0114934
Facility ID: 0829700165
Effective Date: 11/6/2015

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
 - (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Regional Air Pollution Control Agency.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Regional Air Pollution Control Agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Regional Air Pollution Control Agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Regional Air Pollution Control Agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Regional Air Pollution Control Agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Regional Air Pollution Control Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Regional Air Pollution Control Agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



Final Permit-to-Install
CEMEX Construction Materials Atlantic, LLC
Permit Number: P0114934
Facility ID: 0829700165
Effective Date: 11/6/2015

B. Facility-Wide Terms and Conditions



Final Permit-to-Install
CEMEX Construction Materials Atlantic, LLC
Permit Number: P0114934
Facility ID: 0829700165
Effective Date: 11/6/2015

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.



Final Permit-to-Install
CEMEX Construction Materials Atlantic, LLC
Permit Number: P0114934
Facility ID: 0829700165
Effective Date: 11/6/2015

C. Emissions Unit Terms and Conditions



1. P003, Clinker Production (Quarry Plant)

Operations, Property and/or Equipment Description:

Four stage preheater cement kiln with in line raw mill, low NOx burner and two stacks. Main kiln stack with baghouse, selective non-catalytic reduction and lime spray injection. Alkali bypass stack with baghouse and lime spray injection.

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
- b) Applicable Emissions Limitations and/or Control Requirements
 - (1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) June 30, 2008	Compliance with the emissions limitations of 40 CFR Part 63, Subpart LLL.
b.	OAC rule 3745-31-05(D) (United States of America and the State of Ohio v. CEMEX, Inc. and CEMEX Construction Materials Atlantic, LLC, (Civil Action No. 3:11CV00037), lodged February 10, 2011 United States District Court Southern District of Ohio, Western Division.	<p>The NOx emissions from this emissions unit shall not exceed 1.85 pounds per ton of cement clinker manufactured as a 30-day rolling average.</p> <p>The SO2 emissions from this emissions unit shall not exceed 1.1 pounds per ton of cement clinker manufactured as a 30-day rolling average.</p> <p>See b)(2)a. through b)(2)e.</p>
c.	OAC rule 3745-17-11(B)	The particulate emissions limitations specified by this rule are less stringent than the emissions limitations specified by 40 CFR Part 63, Subpart LLL.
d.	OAC rule 3745-17-07(A)	<p>Visible particulate emissions from the stacks serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.</p> <p>See b)(2)f.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-18-35	The SO ₂ emissions limitations specified by this rule are less stringent than the emissions limitations established according to OAC rule 3745-31-05 (D).
f.	OAC rule 3745-17-07(B)	See b)(2)g.
g.	OAC rule 3745-17-08(B)	See b)(2)g.
h.	OAC rule 3745-14-11	See b)(2)h.
i.	40 CFR part 63, Subpart LLL	<p>The particulate emissions from this emissions unit shall not exceed 0.07 pound per ton of clinker manufactured.</p> <p>See b)(2)i.</p> <p>The D/F emissions from this emissions unit shall not exceed 0.20 nanogram per dry standard cubic meter (TEQ) corrected to seven percent oxygen, or 0.40 nanogram per dry standard cubic meter corrected to seven percent oxygen if the average temperature at the inlet to the baghouse during the D/F performance test is 400 °F or less.</p> <p>The mercury emissions from this emissions unit shall not exceed 55 pounds per million tons of clinker manufactured as a rolling 30 day average.</p> <p>The total hydrocarbon emissions shall not exceed 24 parts per million volume on a dry basis (ppmvd) corrected to seven percent oxygen or the total organic hazardous air pollutant (HAP) emissions shall not exceed 12 ppmvd corrected to seven percent oxygen as a rolling 30-day average.</p> <p>The hydrogen chloride (HCl) emissions from this emissions unit shall not exceed 3 ppmvd corrected to seven percent oxygen as a rolling 30-day average.</p> <p>The visible particulate emissions from the raw mill shall not exhibit opacity greater than 10 percent.</p> <p>See b)(2)j.,</p>

(2) Additional Terms and Conditions

- a. The NO_x and SO₂ emissions limitations are based on the sum of the combined emissions from the main kiln stack and the alkali bypass stack.
- b. As defined in the consent decree, the permittee shall continuously operate the selective non-catalytic reduction (SNCR) control system installed to control NO_x emissions from the main kiln stack on this emissions unit when the cement kiln is in 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 cement kiln, and good air pollution control practices for minimizing emissions.
- c. As defined in the consent decree, the permittee shall continuously operate the lime spray injection (LSI) control system installed to control SO₂ emissions from the alkali bypass stack on this emissions unit when the cement kiln is in 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 cement kiln, and good air pollution control practices for minimizing emissions.
- d. The permittee shall operate NO_x and SO₂ continuous emissions monitoring systems (CEMS) in both the main kiln stack and alkali bypass stack at all times this emissions unit is in operation, except as otherwise provided in 40 CFR Part 60. All NO_x and SO₂ emissions shall be measured by the CEMS.

The CEMS consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

If the CEMS are inoperable or otherwise not measuring and recording valid NO_x or SO₂ emissions data, the permittee shall use the missing data substitution procedures in 40 CFR Part 75, Subpart D, and shall report NO_x and SO₂ CEMS downtime in accordance with 40 CFR Part 60, Section 60.7(c).

The permittee shall maintain a written quality assurance/quality control plan for the NO_x and SO₂ CEMS, designed to ensure continuous valid and representative readings of NO_x and SO₂ emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and records dedicated to the NO_x and SO₂ CEMS must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

- e. Emission reductions resulting from compliance with the requirements of the Consent Decree (Civil Action No. 3:11CV00037, lodged February 10, 2011 in United States District Court Southern District of Ohio, Western Division) shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining netting credits or offsets under the Clean Air Act's Non-attainment NSR and PSD programs.

The limitations on the generation and use of netting credits or offsets do not apply to emission reductions achieved by the CEMEX Companies at the Xenia Kiln that are greater than those required under the Consent Decree. For purposes of this Paragraph, emission reductions are greater than those required under this Consent Decree if they result from compliance with enforceable emission limitations that are more stringent than the limits imposed under the 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.

- f. The permittee shall operate continuous opacity monitoring systems (COMS) in both the main kiln stack and alkali bypass stack at all times this emissions unit is in operation, except as otherwise provided in 40 CFR Part 60. The COMS consists of all the equipment used to acquire data and record opacity.

The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system, designed to ensure continuous valid and representative readings of opacity and compliance with 40 CFR Part 60, Appendix B, Performance Specification 1. The plan shall include, at a minimum, procedures for conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring accurate operation of the continuous opacity monitoring system on a continuous basis. The quality assurance/quality control plan and records dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

The permittee must demonstrate continuous compliance with the revised particulate emissions limitations of 40 CFR Part 63, Subpart LLL by installing and operating a particulate emissions continuous parameter monitoring system (CPMS) by September 9, 2015. Once CEMEX has demonstrated compliance with the revised particulate emissions limitations of Subpart LLL and the particulate CPMS is in operation, the COMS may be decommissioned and removed.

- g. The installation and use of hoods, fans, and/or other equipment to adequately enclose, contain, capture, vent, and control fugitive dust from this emissions unit shall meet the following requirements:
- i. the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

- ii. The particulate emissions limitation established according to 40 CFR Part 63, Subpart LLL is more stringent than the 0.030 grain per dry standard cubic foot or no visible particulate emissions (whichever is less stringent) from the exhaust stack emissions limitation established according the rule.

- h. The permittee shall not operate the kiln during May 1 through September 30, unless the permittee has installed and operates the kiln with low-NOx burners, mid-kiln system firing, or alternative control techniques, subject to approval by the Director, that achieve at least the same emissions decreases as low-NOx burners or mid-kiln system firing.

In accordance with OAC rule 3745-14-11(D), the requirements of OAC rule 3745-14-11 shall not apply during periods of start-up and shutdown and periods of malfunction not to exceed thirty-six consecutive hours and during regularly scheduled maintenance activities.

- i. When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the combined PM emissions from the kiln and the alkali bypass stack and/or the inline coal mill stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust and/or coal mill exhaust with the kiln exhaust and send the combined exhaust to the PM control device as a single stream may meet an alternative PM emissions limit. This limit is calculated using Equation 1 of 40 CFR Part 63.1343(b)(2).

- j. The following requirements become effective on and after September 9, 2015:

40 CFR 63.1340	Applicability and designation of affected sources
40 CFR 63.1341	Definitions
40 CFR 63.1342	Standards: General provisions
40 CFR 63.1343(a) and (b)	Standards for existing in-line kilns/raw mills
40 CFR 63.1344	Affirmative defense for malfunctions
40 CFR 63.1346(a) and (b)	Particulate matter control device (PMCD) inlet temperature limits
40 CFR 63.1346(f)	Fly ash and raw material mercury restrictions
40 CFR 63.1346(g)	Start up and shutdown requirements
40 CFR 63.1347	Operation and Maintenance Plan requirements
40 CFR 63.1351	Compliance dates
40 CFR 63.1356	Sources with multiple emissions limits or monitoring requirements
40 CFR 63.1357	Temporary exemption from particulate matter and opacity standards
40 CFR 63.1358	Implementation and enforcement

c) Operational Restrictions

- (1) The permittee shall only employ coal, virgin No. 2 fuel oil, petroleum coke, coke breeze and/or natural gas as fuel in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain on site, the document(s) of certification received from the U.S. EPA or the Ohio EPA Central Office documenting that:
 - a. the NO_x CEMS has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6;
 - b. the SO₂ CEMS has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6;
 - c. the COMS has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 1.

The letter(s)/document(s) of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

- (2) The permittee shall operate and maintain equipment to continuously monitor and record:
 - a. NO_x;
 - b. SO₂;

emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

- c. The permittee shall maintain records of all data obtained by the CEMS including, but not limited to emissions of:
 - i. NO_x
 - ii. SO₂;

in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;
- d. The emissions of:
 - i. NO_x

- ii. SO₂;

in pounds per hour and in units of the applicable standard(s) in the appropriate averaging period;
- e. results of quarterly cylinder gas audits;
- f. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- g. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- h. hours of operation of the emissions unit, NO_x and SO₂ CEMS, and control equipment;
- i. the date, time, and hours of operation of the emissions unit without the control equipment and/or NO_x and SO₂ CEMS;
- j. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the NO_x and SO₂ CEMS; as well as,
- k. the reason (if known) and the corrective actions taken (if any) for each such event in d)(2)(i) and d)(2)(j).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

- (3) The permittee shall collect and record the following information each day for this emissions unit:
 - a. The type of fuel being used;
 - b. The weight of cement clinker manufactured, in tons;
 - c. The rolling 30-day total weight of clinker manufactured, in tons (the weight in d)(3)b. plus the sum of the weights for the 29 previous operating days);
 - d. The NO_x emissions, in pounds, based on the CEMS data collected according to d)(2);
 - e. The rolling 30-day total NO_x emissions, in pounds, (the weight in d)(3)d. plus the sum of the weights for the 29 previous operating days);
 - f. The NO_x emissions, in pounds NO_x per ton of clinker, as a 30-day rolling average (d)(3)e. divided by d)(3)c.);
 - g. The SO₂ emissions, in pounds, based on the CEMS data collected according to d)(2);

- h. The rolling 30-day total SO₂ emissions, in pounds, (the weight in d)(3)g. plus the sum of the weights for the 29 previous operating days);
 - i. The SO₂ emissions, in pounds SO₂ per ton of clinker, as a 30-day rolling average (d)(3)h. divided by d)(3)c.);
- (4) As part of the installation of the SNCR on the main kiln stack, the permittee shall install and operate at all times during kiln operation a monitoring system to continuously measure the ammonia reagent injection rate of the SNCR system. The monitoring system must:
- a. be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations;
 - b. The ammonia reagent injection rate shall be measured in gallons per minute;
 - c. The ammonia reagent injection rate shall be recorded with the NO_x CEMS data in the data acquisition handling system.
- (5) The following requirements become effective on and after September 9, 2015:

40 CFR 63.1350(a)	Continuous compliance demonstration
40 CFR 63.1350(b)	Particulate matter monitoring requirements
40 CFR 63.1350(d)	Clinker production monitoring
40 CFR 63.1350(f)	Opacity monitoring requirements
40 CFR 63.1350(g)	Dioxin/furan monitoring requirements
40 CFR 63.1350(i)	Total hydrocarbon monitoring requirements
40 CFR 63.1350(j)	Total organic HAP monitoring requirements
40 CFR 63.1350(k)	Mercury monitoring requirements
40 CFR 63.1350(l)	HCl monitoring requirements
40 CFR 63.1350(m)	Parameter monitoring requirements
40 CFR 63.1350(n)	Continuous flow rate monitoring system
40 CFR 63.1350(o)	Alternative monitoring requirements approval
40 CFR 63.1350(p)	Development and submittal of monitoring plans
40 CFR 63.1355(a)	Records maintenance and availability for inspection
40 CFR 63.1355(b)	Record keeping general provisions
40 CFR 63.1355(c)	Continuous monitoring system records
40 CFR 63.1355(d)	Cement kiln dust removal records
40 CFR 63.1355(e)	Clinker production and kiln feed records
40 CFR 63.1355(f)	Start up and shut down records
40 CFR 63.1355(g)	Malfunction records
40 CFR 63.1355(h)	Exceedance records

- (6) In accordance with OAC rule 3745-14-11(C)(2), the permittee must keep the following records for May 1 through September 30:
- a. the average NO_x emissions, in pounds of NO_x per ton of clinker produced from the kiln;



- b. the date, time and duration of any startup, shutdown or malfunction of the cement kiln or the NOx emissions monitoring equipment;
- c. the results of any NOx emissions testing; and
- d. the daily cement production from the kiln, in tons.

All records kept in compliance with OAC rule 3745-14-11 shall be kept on site for a minimum of two years and be made available to the Director upon request.

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. Any day when the NOx emissions exceeded 1.85 pounds NOx per ton of cement clinker manufactured as a 30-day rolling average and any associated SNCR downtime;
 - b. Any day when the SO2 emissions exceeded 1.1 pounds SO2 per ton of cement clinker manufactured as a 30-day rolling average and any associated LSI downtime;
 - c. Any day when a fuel other than natural gas, coal, pet coke or coke breeze was used;
 - d. The probable cause of each deviation (excursion);
 - e. The magnitude of each deviation (excursion);
 - f. Any corrective actions that were taken to remedy the deviation (excursion) and/or prevent future deviation (excursions).

If no deviation (excursion) occurred during a calendar quarter, the permittee shall submit a report that states that no deviation (excursion) occurred during the quarter.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its NOx and SO2 CEMS:
 - a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA

District Office or local air agency, documenting all instances of NO_x emissions in excess of any applicable limit specified in this permit, OAC Chapters 3745-14, 3745-18 and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
- i. the facility name and address;
 - ii. the manufacturer and model number of the NO_x and SO₂ CEMS and other associated monitors;
 - iii. a description of any change in the equipment that comprises the CEMS, including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total NO_x and SO₂ CEMS emissions for the calendar quarter (tons);
 - vi. the total operating time (hours) of the emissions unit;
 - vii. the total operating time of the NO_x and SO₂ CEMS while the emissions unit was in operation;
 - viii. results and dates of quarterly cylinder gas audits;
 - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
 - x. unless previously submitted, the results of any relative accuracy test audit showing the NO_x and SO₂ CEMS out-of-control and the compliant results following any corrective actions;
 - xi. the date, time, and duration of any/each malfunction** of the continuous NO_x and SO₂ monitoring system;
 - xii. the date, time, and duration of any downtime** of the NO_x and SO₂ CEMS while the emissions unit was in operation; and
 - xiii. the reason (if known) and the corrective actions taken (if any) for each event in e)(1)b.xi. and e)(1)b.xii.

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

The quarterly reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

- (3) Until the particulate CPMS in operation as required by 40 CFR Part 63, Subpart LLL, The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its COMS:
- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of opacity values in excess of any limitation specified in this permit, 40 CFR Part 60, OAC rule 3745-17-07, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude (percent opacity) of each 6-minute block average exceeding the applicable opacity limitation(s), as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance.
 - b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
 - i. the facility name and address;
 - ii. the manufacturer and model number of the continuous opacity monitor;
 - iii. a description of any change in the equipment that comprises the continuous opacity monitoring system (COMS), including any change to the hardware, changes to the software that may affect COMS readings, and/or changes in the location of the COMS sample probe;
 - iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
 - v. the total operating time (hours) of the emissions unit;
 - vi. the total operating time of the continuous opacity monitoring system while the emissions unit was in operation;



- vii. the date, time, and duration of any/each malfunction** of the continuous opacity monitoring system, emissions unit, and/or control equipment;
- viii. the date, time, and duration of any downtime** of the continuous opacity monitoring system and/or control equipment while the emissions unit was in operation; and
- ix. the reason (if known) and the corrective actions taken (if any) for each event in (b)(vii) and (viii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

The quarterly reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit. Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

* where no exceedance of the opacity limit has occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the quarterly EER report

** each downtime and malfunction event shall be reported regardless of whether there is an exceedance of the opacity limit.

- (4) The following requirements become effective on and after September 9, 2015:

40 CFR 63.1353(a)	Notification – General provisions
40 CFR 63.1353(b)	Required notifications
40 CFR 63.1354(a)	Reporting – General Provisions
40 CFR 63.1354(b)	Required reports
40 CFR 63.1354(c)	Malfunction reporting

- (5) In accordance with OAC rule 3745-14-11(C)(1)(b), the permittee shall submit a report documenting the total NOx emissions from May 1 through September 30 of each year to the Director by October 31 of each year.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in b) shall be determined in accordance with the following methods:

a. Emissions Limitation –

The NOx emissions from this emissions unit shall not exceed 1.85 pounds per ton of cement clinker manufactured as a 30-day rolling average.

The SO2 emissions from this emissions unit shall not exceed 1.1 pounds per ton of cement clinker manufactured as a 30-day rolling average.



Applicable Compliance Method -

Ongoing compliance with the NOx and SO2 emissions limitations contained in this permit, and any other applicable standards shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

b. Emissions Limitation -

Visible particulate emissions from the stacks serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method -

If requested, compliance shall be demonstrated in accordance with U.S. EPA Reference Method 9 of 40 CFR Part 60, Appendix A and OAC rule 3745-17-03(B)(1).

(2) The following requirements become effective on and after September 9, 2015:

40 CFR 63.1348(a)	Initial performance testing
40 CFR 63.1348(b)	Continuous monitoring requirements
40 CFR 63.1349(a)	Test report contents
40 CFR 63.1349(b)	Performance testing for particulate matter, opacity, dioxin/furan, total hydrocarbons, mercury, hydrogen chloride and total HAP emissions testing
40 CFR 63.1349(c)	Performance test frequency
40 CFR 63.1349(d)	Performance test reporting requirements
40 CFR 63.1349(e)	Performance test requirements

g) Miscellaneous Requirements

(1) None.