PERMIT # 63592
PLACE ID # 5992

PERMITTEE: **Lhoist North America**
FACILITY: **Nelson Lime Plant**
PERMIT TYPE **Class I Air Quality Permit**
DATE ISSUED:
EXPIRY DATE:

SUMMARY

This Class I renewal permit is issued to Lhoist North America of Arizona, Inc., the Permittee, for continued operation of its limestone processing and lime manufacturing plant located approximately six miles east of Peach Springs in Yavapai County, Arizona. This permit renews and supersedes Permit No. 42782.

The potential to emit of the particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_x), and carbon monoxide (CO) is greater than the major source thresholds. Also, the potential to emit of hydrogen chloride (HCl) also exceeds the major hazardous air pollutant threshold. Therefore, the facility is classified as a major source as defined in A.A.C. R18-2-101(75), and requires a Class I permit pursuant to A.A.C. R18-302.B.1.a.

This permit is issued in accordance with Arizona Revised Statutes (A.R.S.) 49-426. It contains requirements from Title 18, Chapter 2 of the Arizona Administrative Code (A.A.C.) and Title 40 of the Code of Federal Regulations (CFR). All definitions, terms, and conditions used in this permit conform to those in the A.A.C. R18-2-101 et. seq. and Title 40 of the CFR, except as otherwise defined in this permit.

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

[ARS § 49-426.F, A.A.C. R18-2-304.C.2, and -306.A.1]

A. This permit is valid for a period of five years from the date of issuance.

B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months, prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

[A.A.C. R18-2-306.A.8.a and b]

A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the A.R.S. Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the A.A.C. Any noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.

B. It shall not be a defense for a 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 conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[A.A.C. R18-2-306.A.8.c, -321.A.1, and -321.A.2]

A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

B. The permit shall be reopened and revised under any of the following circumstances

1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless an application for renewal has been submitted pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term.

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material

mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

C. Proceedings to reopen and reissue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

A. The Permittee shall post this permit or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:

1. Current permit number; or

2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.

B. A copy of the complete permit shall be kept on site.

V. FEE PAYMENT

[A.A.C. R18-2-306.A.9 and -326]

The Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327.A and B]

A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

A. The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than August 15th, and shall report the compliance status of the source during the period between January 1st and June 30th of the current year. The second certification shall be submitted no later than February 15th, and shall report the compliance status of the source during the period between July 1st and December 31st of the previous year.

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;

2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period.

3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Condition VII.A.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;

4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;

5. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and

6. Other facts the Director may require to determine the compliance status of the source.

B. A copy of all compliance certifications shall also be submitted to the EPA Administrator.

C. If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

[A.A.C. R18-2-304.H]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY

[A.A.C. R18-2-309.4]

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. ACCIDENTAL RELEASE PROGRAM

[40 CFR Part 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

[A.A.C. R18-2-310.01.A and -310.01.B]

1. Excess emissions shall be reported as follows:

   a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

      (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XII.A.1.b below.

      (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a.(1) above.

   b. The report shall contain the following information:

      (1) Identity of each stack or other emission point where the excess emissions occurred;

      (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess

emissions;

(3) Date, time and duration, or expected duration, of the excess emissions;

(4) Identity of the equipment from which the excess emissions emanated;

(5) Nature and cause of such emissions;

(6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and

(7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.

[A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting

[A.A.C. R18-2-306.A.5.b]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit requirement.

C. Emergency Provision

[A.A.C. R18-2-306.E]

1. An “emergency” means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition

XII.C.3 is met.

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

   a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;

   b. The permitted facility was being properly operated at the time;

   c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and

   d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Compliance Schedule

[ARS § 49-426.I.5]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

[A.A.C. R18-2-310]

1. Applicability

   This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

   a. Promulgated pursuant to Sections 111 or 112 of the Act;

   b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;

   c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;

   d. Contained in A.A.C. R18-2-715.F; or

e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;

b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;

d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the A.A.C. that could be attributed to the emitting source;

h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;

i. All emissions monitoring systems were kept in operation if at all practicable; and

j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records

3. Affirmative Defense for Startup and Shutdown

a. Except as provided in Condition XII.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

(1) The excess emissions could not have been prevented through careful and prudent planning and design;

(2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;

(3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

(4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

(5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;

(6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the A.A.C. that could be attributed to the emitting source;

(7) All emissions monitoring systems were kept in operation if at all practicable; and

(8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.E.2 above.

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.E.2 above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3 above, the Permittee shall demonstrate, through submission of the data and information required by Condition XII.E and A.A.C. R18-2-310.01, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

XIII. RECORD KEEPING REQUIREMENTS

[A.A.C. R18-2-306.A.4]

A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;

2. The date(s) analyses were performed;

3. The name of the company or entity that performed the analyses;

4. A description of the analytical techniques or methods used;

5. The results of such analyses; and

6. The operating conditions as existing at the time of sampling or measurement.

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

C. All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

XIV. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

The Permittee shall submit the following reports:

A. Compliance certifications in accordance with Section VII of Attachment "A".

B. Excess emission; permit deviation, and emergency reports in accordance with Section XII of Attachment "A".

C. Other reports required by any condition of Attachment "B".

XV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and -306.A.8.e]

A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish

an additional copy of such records directly to the Administrator along with a claim of confidentiality.

B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, -319, and -320]

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

A. Administrative Permit Amendment (A.A.C. R18-2-318);

B. Minor Permit Revision (A.A.C. R18-2-319); and

C. Significant Permit Revision (A.A.C. R18-2-320)

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

[A.A.C. R18-2-317]

A. The Permittee may make changes at the permitted source without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(24);

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;

4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A; and

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVII.A and XVII.C of this Attachment.

C. For each change under Conditions XVII.A and XVII.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment,

may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.

D. Each notification shall include:

1. When the proposed change will occur;

2. A description of the change;

3. Any change in emissions of regulated air pollutants; and

4. Any permit term or condition that is no longer applicable as a result of the change.

E. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section.

F. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section.

G. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, do not satisfy Condition XVII.A above.

XVIII. TESTING REQUIREMENTS

[A.A.C. R18-2-312]

A. The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

B. Operational Conditions During Testing

Tests shall be conducted during operation at the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

C. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

D. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. Test duration;

2. Test location(s);

3. Test method(s); and

4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;

2. Safe sampling platform(s);

3. Safe access to sampling platform(s); and

4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

G. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

XIX. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

XXI. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XVI.B of this Attachment and any facility changes without a permit revision pursuant to Section XVII of this Attachment.

XXII. PROTECTION OF STRATOSPHERIC OZONE

[40 CFR Part 82]

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

XXIII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

[40 CFR Part 60, Part 63]

For all equipment subject to a New Source Performance Standard or a National Emission Standard for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 and Chapter 63 of the Code of Federal Regulations.

ATTACHMENT "B": SPECIFIC CONDITIONS

I. GENERAL REQUIREMENTS

A. The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all Method 9 observations or instantaneous visual observations required by this permit are conducted as Alternative Method-082 (Digital Camera Operating Technique). The Permittee shall certify the camera and the associated software in accordance with ALT-082 procedures. Any Method 9 test or instantaneous visual survey required by this permit can be conducted as ALT-082. The results of a Method 9 observation or any individual instantaneous visual observation conducted as ALT-082 shall be obtained within 30 minutes of completing the Method 9 observation or individual instantaneous visual observation.

[A.A.C. R18-2-306.A.2 and A.3.c]

B. All equipment, facilities, and systems used to achieve compliance with the terms and conditions of this permit shall be maintained in good working order and be operated as efficiently as practicable so as to minimize air pollutant emissions.

[Installation Permits Nos. 1046 and 1111]

C. The Permittee shall comply with the requirements of the current approved Dust Control Plan. Changes to the approved Dust Control Plan shall not be implemented unless approved by the Director.

[A.A.C. R18-2-306.A.3.c]

D. Nothing in this Attachment shall be so construed as to prevent the utilization of measurements from emissions monitoring devices or techniques not designated as performance tests as evidence of compliance with applicable good maintenance and operating requirements.

[A.A.C. R18-2-312.I]

E. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring and reporting activities required by this Attachment performed in the same six month period as applies to the compliance certification period.

[A.A.C. R18-2-306.A.5.a]

F. Control Device Monitoring and Maintenance Procedure:

[A.A.C. R18-2-306.A.3.c]

1. The Permittee shall implement a baghouse monitoring procedure as follows for all baghouses identified in Attachment "C" in accordance to the schedule that is specified by each condition that refers to this procedure:

    a. The Permittee shall record the differential pressure across the baghouse using a differential pressure measurement device.

    b. The Permittee shall verify proper pulse timing sequence for the baghouses and record of the verification.

c. The Permittee shall maintain the baghouses as follows:

(1) The Permittee shall conduct an inspection of the baghouse cleaning system and fan.

(2) The Permittee shall inspect the internal components of the baghouse including hoppers, and shell. The Permittee shall record the various components of the system that have been inspected.

2. If maintenance is required, the Permittee shall record details of the type of maintenance and the date the maintenance was performed. If maintenance is not required, the Permittee shall record the fact that maintenance is not required.

3. If the baghouse has not operated during the timeframe in which the inspection is required, the Permittee shall record the fact that the baghouse has not operated.

G. Visible Emissions Observation Procedure:

1. The Permittee shall implement the Visual Observation Plan, Fifth Edition, dated May 4, 2012, approved by the Director June 4, 2012. Any changes to the approved Visual Observation Plan shall not be implemented unless approved by the Director.

2. The Permittee shall conduct visible emissions observations in accordance with the Visual Observation Plan. When multiple observation points are used, all the sources associated with each observation point shall be specifically identified within the observation plan.

3. A certified Method 9 observer shall conduct a visual survey of visible emissions from the sources in accordance with the observation plan under representative operating conditions. The survey shall be conducted at the frequency specified in the permit condition that refers to this procedure. The Permittee shall keep a record of the name of the observer, the date and time on which the survey was made, the location(s) of the survey, and the results of the survey.

4. If the observer sees a plume from a source that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

5. If the six-minute opacity of the plume is less than the applicable opacity standard, the observer shall make a record of the following:

a. Location, date, and time of the observation; and

b. The results of the Method 9 observation.

6. If the six-minute opacity of the plume exceeds the applicable opacity standard, then the Permittee shall do the following:

a. Adjust or repair the controls or equipment to reduce opacity to below the applicable opacity standard;

b. Report as an excess emission in accordance with Section XII of Attachment "A" of this permit; and

c. Conduct a six-minute Method 9 observation reading within 48 hours after taking corrective action. The results of this observation, including the date, time, and location, shall be recorded.

II. CRUSHING AND SCREENING PLANT AND KILN FEED EQUIPMENT SUBJECT TO A.A.C. R-18-2-720

A. Applicability

This Section applies to equipment that is identified in Attachment "C" as subject to this Section.

B. Particulate Matter and Opacity

1. Emission Limitations

a. The opacity of any plume or effluent emanating from the emissions units subject to this Section shall not exceed 20 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C. R18-2-702.B]

b. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from any emission unit subject to this Section, particulate matter in excess of the amounts calculated by the following equations:

[A.A.C. R18-2-720.B]

(1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$E = 4.10P^{0.67}$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

(2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$E = 55.0P^{0.11} - 40$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

c. For the purposes of this permit, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-720.D]

2. Air Pollution Control Requirements

At all times when any emission unit subject to this Section is in operation including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain *and operate the associated control measure/device in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.*

[A.A.C. R18-2-306.A.2 and -331.A.3.e]
[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping Requirements

a. The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.G of this Attachment, once every two weeks to monitor emissions from material transfer points at the process sources affected under this Section and emissions from baghouses DC 234, DC 213, DC 219-D, and DC 206-D.

[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.F of this Attachment, once every month on baghouses DC 234, DC 213, DC 219-D, and DC 206-D.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-702.B, A.A.C. R18-2-720.B and A.A.C. R18-2-720.D.

[A.A.C. R18-2-325]

III. CRUSHING AND SCREENING PLANT AND KILN FEED EQUIPMENT SUBJECT TO NSPS SUBPART OOO

A. Applicability

This Section applies to equipment that is identified in Attachment "C" as subject this Section.

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

At all times except during periods of startup, shutdown, or malfunction, the Permittee shall not allow to be discharged into the atmosphere from any affected facility except crushers any fugitive emissions which exhibit visible emissions greater than 10 percent opacity.

[40 CFR 60.672.b, 60.11(c) and A.A.C. R18-2-331.A.3.f]
[Material permit conditions are indicated by underline and italics]

2. Air Pollution Control Requirements

At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and *operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.*

[A.A.C. R18-2-331.A.3.e, -306.A.2, 40 CFR § 60.11(d)]
[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping Requirements

The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.G of this Attachment, once every two weeks to monitor emissions from the affected process sources under this Section.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with 40 CFR 60.672(b) and 60.675(c)(1).

[A.A.C. R18-2-325]

IV. SOLID FUEL HANDLING EQUIPMENT SUBJECT TO A.A.C. R18-2-716

A. Applicability

This Section applies to equipment that is identified in Attachment "C" as subject to this Section.

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The opacity of any plume or effluent emanating from any emission unit subject to this Section shall not exceed 20 percent, as determined by EPA Reference Method 9 in 40 CFR 60 Appendix A.

[A.A.C. R18-2-702.B]

b. The Permittee shall not cause, allow, or permit the discharge into the atmosphere in any one hour, from any emission unit subject to this Section, particulate matter in excess of the amounts calculated by one of the following equations:

(1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$E = 4.10P^{0.67}$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

(2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$E = 55.0P^{0.11} - 40$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

[A.A.C. R18-2-716.B]

(3) For the purposes of this permit, the total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate

matter.

[A.A.C. R18-2-716.D]

2. Air Pollution Control Requirements

At all times when any emission unit subject to this Section is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and *operate the associated control measure/devices, in a manner consistent with good air pollution control practice for minimizing particulate matter emissions*.

[A.A.C. R18-2-306.A.2 and -331.A.3.e]
[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping Requirements

a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.G of this Attachment, once every two weeks to monitor emissions from all material transfer points subject to this Section.

[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall, once every month, conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.F for baghouse DC 527.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-702.B, -716.B and -716.D.

[A.A.C. R18-2-325]

V. SOLID FUEL HANDLING EQUIPMENT SUBJECT TO NSPS SUBPART Y

A. Applicability

This Section applies to equipment that is identified in Attachment "C" as subject to this Section.

B. Emission Limitations and Standards

1. Particulate Matter and Opacity

At all times except during periods of startup, shutdown, or malfunction, the Permittee shall not cause to be discharged into the atmosphere from any emissions unit subject to this Section, gases which exhibit 20 percent opacity or greater. Compliance with the opacity standard shall be determined by conducting observations in accordance with EPA Reference Method 9 in 40 CFR 60, Appendix A.

[40 CFR § 60.254(a), 60.11(c) and A.A.C. R18-2-331.A.3.f]
[Material permit conditions are indicated by underline and italics]

2. Air Pollution Control Requirements

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall , to the extent practicable, maintain and *operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.* Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR § 60.11(d), A.A.C. R18-2-331.A.3.e,]
[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting, Recordkeeping Requirements

The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.G of this Attachment, once every two weeks to monitor emissions from the affected emission units subject to this Section.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with 40 CFR 60.254(a) and 60.257(a).

[A.A.C. R18-2-325]

VI. KILN 1 AND KILN 2 SYSTEMS AND ASSOCIATED STONE HANDLING FACILITIES

A. Applicability

This Section applies to all equipment in Kilns 1 and 2 systems and associated stone handling facilities identified in Attachment "C" as subject to this Section.

B. General Requirements

1. Operating Requirements

a. Operations, Maintenance and Monitoring (OM&M) Plan

[40 CFR 63.7100(d)]

(1) The Permittee shall implement the written OM&M Plan. Any subsequent changes to the plan must be submitted to the Director for approval. Pending approval of the initial or amended plan, the Permittee shall comply with the provisions of the submitted plan.

(2) The OM&M Plan shall contain all the information required in 40 CFR 63.7100(d)(1) through 40 CFR 63.7100(d)(7).

b. Startup, Shutdown, and Malfunction Plan (SSMP)

[40 CFR 63.7100(e)]

The Permittee shall implement a SSMP according to the requirements in 40 CFR 63.6(e)(3).

c. Fuel Limitation

The Permittee shall only use the following material as fuel for the rotary kilns identified in this Section:

(1) Fuel oil;

(2) Coal;

(3) Petroleum coke;

(4) Any combination of (1) though (3) above.

[A.A.C R18-2-306.A.2]

d. Kiln 1 Stack Limitation

The Kiln 1 Stack must be at least 140 feet above ground level.

[A.A.C R18-2-306.A.2]

C. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The Permittee shall not cause, allow or permit the discharge of particulate matter in excess of 0.12 pounds per ton of stone feed (lb/tsf) from Kiln 1, Kiln 2 and their associated lime coolers, or the weighted average of the two kilns and associated lime coolers.

[40 CFR 63.7090(a) Table 1, Item 1 & Item 4]

b. The Permittee shall not cause or allow to be emitted into the atmosphere from each kiln and associated lime cooler any gases which exhibit opacity greater than 15 percent, based on a 6-minute block average.

[40 CFR 63.7090(b), Table 2, Item 1]

c. Fugitive emissions from processed stone handling (PSH) operations-Stone Bin 2-304, Stone Bin 1-304, Belt Conveyor 329, and Weigh Belt 303A shall not exceed 10 percent opacity.

[40 CFR 63.7090(a), Table 1, Item 7]

d. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from the PSH Operations in total quantities in excess of the amounts calculated by one of the following equations:

[A.A.C. R18-2-730.B]

(1) For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$E = 4.10P^{0.67}$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

(2) For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$E = 55.0P^{0.11} - 40$

Where "E" and "P" are defined as indicated in Condition VI.C.1.d(1) above.

e. The Permittee shall be in compliance with the opacity limits in Conditions VI.C.1.b and c above at all times except during periods of startup, shutdown, and malfunction. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements

[40 CFR 63.6(h)(1)]

2. Operating Limitations and Standards

a. The Permittee shall vent captured emissions from each emission unit equipped with an add-on air pollution control device though a closed system. Dilution air may be added to emission streams for the purpose of controlling temperature at the inlet to a fabric filter.

[40 CFR 63.7090(b), Table 2 Item 6]

b. The Permittee shall operate each capture and control system according to the procedures and requirements in the Operation, Maintenance and Monitoring (OM&M) Plan required in Condition VI.B.1.a.

[40 CFR 63.7090(b), Table 2 Item 6]

3. Air Pollution Control Requirements

a. *At all times that Kiln 1 is in operation, the Permittee shall operate both the Kiln 1 negative pressure baghouse BGH1and the Multicyclone 1-319 in a manner consistent with good air pollution control practice for minimizing particulate emissions*.

[A.A.C. R18-2-331.A.3.e, and 306.A.2]
[Material permit conditions are indicated by underline and italics]

b. *At all times that Kiln 2 is in operation, the Permittee shall operate both the Kiln 2 negative pressure baghouse BGH2 and the Multicyclone 2-319 in a manner consistent with good air pollution control practice for minimizing particulate emissions*.

[A.A.C. R18-2-331.A.3.e, and 306.A.2]
[Material permit conditions are indicated by underline and italics]

c. *At all times, including periods of startup, shutdown, and malfunction, the Permittee shall operate* and maintain *any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.* During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the Permittee reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the Permittee to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the Permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6(e)(1)(i), A.A.C. R18-2-331.A.3.e]
[Material permit conditions are indicated by underline and italics]

4. Monitoring Requirements

a. The Permittee shall inspect each capture/collection and closed vent system for each emission unit equipped with an add on air pollution device at least once each calendar year to ensure that each system is operating in accordance with Conditions VI.C.2.a and b above, and record the results of the inspection.

[40 CFR 63.7113(f)]

b. Continuous Opacity Monitoring System (COMS) Requirements

(1) *The Permittee shall calibrate*, maintain, and operate *the two continuous opacity monitoring systems (COMS) installed at the Kiln 1 stack and the Kiln 2 stack to monitor and record the opacity of the gases discharged from each kiln at all times when the associated kiln is in operation*. The span of the systems shall be set at 70% opacity.

[A.A.C. R18-2-720.F, 40 CFR 63.7113(g) and A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

(2) The COMS shall be maintained, calibrated and operated in accordance with 40 CFR part 63, subpart A, General Provisions and according to 40 CFR 60, Appendix B, "Performance Specification 1 - Specification and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources". Facilities that operate COMS installed on or before February 6, 2001, may continue to meet the requirements in effect at the time of COMS installation unless specifically required to re-certify the COMS by the Director.

[A.A.C. R18-2-A9.3.1.1, 40 CFR 63.7113(g)(2)]

(3) For each lime kiln, the Permittee shall demonstrate continuous compliance by collecting the COMS data at a frequency of at least once every 15 seconds, determining block averages for each 6-minute period and demonstrating for each 6-minute block period the average opacity does not exceed 15 percent.

[40 CFR 63.7121(e), Table 5, Item 4]

(4) The COMS shall meet the following quality assurance requirements:

(a) Calibration checks

[A.A.C. R18-2-A9.4, 40 CFR 63.8(c)(6)]

The Permittee shall check the zero (or low-level value between 0 and 20% of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure prescribed by the manufacturer.

(b) Zero and span drift adjustments

[A.A.C. R18-2-A9.4, 40 CFR 63.8(c)(6)]

(i) The zero and span shall, as a minimum, be adjusted whenever the 24-hr zero drift exceeds two times the limits of the performance specifications in the relevant standard.

(ii) For systems using automatic zero adjustments, the optical and instrumental surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4% opacity.

(iii) The optical and instrumental surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments.

(c) System checks

[A.A.C. R18-2-A9.4.3, 40 CFR 63.8(c)(5), 40 CFR §63.7113(g)(2)]

The Permittee shall, as minimum procedures, apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied shall provide a system check of all analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly normally used in the measurement of opacity.

(d) Minimum frequency of operation

[A.A.C. R18-2-A9.5.1, 40 CFR 63.8(c)(4)(i)]

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS shall be in continuous operation and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period, and one cycle of data recording for each successive 6-minute period.

(e) Data reduction procedures

[A.A.C. R18-2-A9.8, 40 CFR 63.8(g)]

(i) The Permittee shall reduce all data from the COMS to 6-minute averages calculated from 24 or more data points equally spaced over each 6-minute period.

(ii) Data recorded during periods of system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero and span adjustments shall not be included in the data averages computed under Condition VI.C.4.b(4)(e)(i). An arithmetic or integrated average of all data may be used.

c. The Permittee shall conduct visual observations as follows for the equipment subject to the opacity limit in Condition VI.C.1.c.

[40 CFR 63.7121(e), Table 6, Item 1]

(1) The Permittee shall conduct a monthly 1-minute visible emissions (VE) observations of each emission unit; observation shall be conducted while the affected source is in operation.

(2) If no VE are observed in 6 consecutive month checks, decrease the frequency of VE checking from monthly to semi-annually; if VE are observed during any semiannual observation, resume VE observations on a monthly basis, and maintain that schedule until no VE observations are observed in 6 consecutive monthly observations.

(3) If no VE are observed during the semi-annual observation, decrease observations from semi-annually to annually; if VE are observed during any annual check, resume VE observations on a monthly basis, and maintain that schedule until no VE observations are observed in 6 consecutive monthly observations.

(4) If VE are observed during any VE observation, the Permittee shall conduct a 6-minute EPA Reference Method 9 opacity test within 1 hour of any observation of VE, and the 6-minute opacity reading shall not exceed the opacity limit in Condition VI.C.1.c.

(5) The Permittee shall select a position at least 15 feet but not more than 1,320 feet from the affected emission point with the sun at your back.

d. The Permittee shall monitor and collect data according to the following:
[40 CFR 63.7120]

(1) Except for monitor malfunctions, associated repairs, required quality assurance or control activities (including, as applicable, calibration checks and required zero adjustments), and except for PSH operations subject to monthly VE testing, the Permittee shall monitor continuously (or collect data at all required intervals) at all times that the emission unit is operating.

(2) Data recorded during the Conditions VI.C.4.d(2)(a) through (c) below may not be used either in data averages or calculations of emission or operating limits; or in fulfilling a minimum data availability requirement. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(a) Monitoring system breakdowns, repairs, preventive maintenance, calibration checks, and zero (low-level) and high-level adjustments;

(b) Periods of non-operation of the process unit (or portion thereof), resulting in cessation of the emissions to which the monitoring applies; and

(c) Start-ups, shutdowns, and malfunctions.

5. Performance Testing Requirements

a. The Permittee shall conduct all required performance tests within 5 years following the initial performance test and within 5 years following each performance test thereafter.
[40 CFR 63.7111]

b. The Permittee shall conduct each performance test for particulate matter and opacity according to the requirements in 40 CFR 63.7(e)(1) and in accordance with Conditions VI.C.5.g and h below.
[40 CFR 63.7112(b)]

c. The Permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 63.7(e)(1).
[40 CFR 63.7112(c)]

d. The Permittee shall, except for opacity and VE checks, conduct three separate test runs for each performance test required in this section, as specified in 40 CFR 63.7(e)(3). Each test run shall last at least 1 hour.
[40 CFR 63.7112(d)]

e. The Permittee shall calculate the PM emissions from each lime kiln using the following equation:

[40 CFR 63.7112(e)]

$$E = \left(C_k Q_k\right) / PK$$

Where

E = Emission Rate of PM, pounds per ton (lb/ton) of stone feed

Ck = Concentration of PM in the kiln effluent, grain/dry standard cubic feet (gr/dscf)

Qk = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour.

P = Stone feed rate, tons per hour (tons/hr)

K = Conversion factor, 7000 grains per pound (grains/lb)

f. The Permittee may comply with a weighted average PM emission limit by calculating a combined particulate emission rate from all kilns using the following equation:

[40 CFR 63.7112(f)(1)]

$$E_T = \sum_{i-1}^{n} E_i P_i \Big/ \sum_{i-1}^{n} P_i$$

Where

E_T = Weighted Emission Rate of PM from all kilns and coolers, lb/ton of stone feed.

E_i = Emission rate of PM from kiln i, or from kiln/cooler combination I, lb/ton of stone feed.

P_i = Stone feed rate to kiln i, tons/hr.

n = number of kilns used in averaging

g. Performance Testing Requirements for Kiln 1 and Kiln 2

(1) For each lime kiln, the Permittee shall conduct the performance tests when the source is operating at representative operating conditions in accordance with 40 CFR 63.7(e) and in accordance with requirements in Table 4 of 40 CFR 63 Subpart AAAAA.

[40 CFR 63.7112(a), Table 4 to 40 CFR 63 Subpart AAAAA]

(2) The Permittee shall determine the mass rate of stone feed to the kiln during the kiln PM emissions test using any suitable device. The Permittee shall calibrate and maintain the device according to manufacturer's instructions; the measuring device to be used must be accurate to within +/- 5 percent of the mass rate of stone feed over its operating range.

[40 CFR 63.7112(a) Table 4, Item 7]

(3) The Permittee shall have installed and operating a COMS device prior to conducting the PM emissions test on the kilns; the COMS shall be operated in accordance with the requirements set forth in Condition VI.C.4.b.

[40 CFR 63.7112(a) Table 4, Item 11]

h. Performance Testing Requirement for Stone Bin 2-304, Stone Bin 1-304, Belt Conveyor 329, and Weigh Belt 303A.

[40 CFR 63.7112(a) Table 4, Item 17]

(1) The Permittee shall conduct opacity observations of the above emissions points using EPA Reference Method 9.

(2) The Permittee shall use a test duration of at least 3 hours, but the 3-hour test may be reduced to 1 hour if, during the first 1-hour period, there are no individual readings greater than 10 percent opacity and there are no more than three readings of 10 percent during the first 1-hour period.

i. The Permittee shall document in complete test report the following information:

[40 CFR 63.7112(h)]

(1) A description of the process and the air pollution control system

(2) Sampling location descriptions;

(3) A description of sampling and analytical procedures and any modification to standard procedures;

(4) Test results, including opacity;

(5) Quality assurance procedures and results;

(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;

(7) Raw data sheets for field sampling and field and laboratory analysis;

(8) Documentation of calculations

(9) All data recorded and used to establish operating limits; and

(10) Any other information required by the test method

6. Notification Requirements

a. The Permittee shall submit all of the notifications in 40 CFR 63.6(h)(4), and (5); 63.7(b) and (c); 63.8(e), f(4) and (6); and 63.9(a) through (j)that apply by the applicable deadline below.

[40 CFR 63.7130(a)]

b. The Permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in 40 CFR 63.7(b)(1).

[40 CFR 63.7130(d)]

7. Reporting Requirements

a. The Permittee shall submit semi-annual compliance certification reports to the Administrator and to the Director detailing the compliance status with the 40 CFR §63 Subpart AAAAA requirements by January 31 for the reporting period July 1 through December 31, and by July 31 for the reporting period January 1 through June 30 of each year.

[40 CFR §63.7131]

b. The semi-annual compliance certification shall include the following information:

[40 CFR 63.7131(c)]

(1) Company name and address.

(2) Statement by the responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If the facility had a startup, shutdown or malfunction during the reporting period and the Permittee took actions consistent with the SSMP, the compliance report shall include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and VE limit) that apply to the facility, the compliance report shall include a statement that there were no deviations from the emission limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring systems (CMS) were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMS were out-of-control during the reporting period.

c. The Permittee shall report as a deviation each instance in which the operating limit, opacity limit, or VE limit in Table 2 and Table 6 of 40

CFR §63 Subpart AAAAA as applicable are exceeded. This includes periods of startup, shutdown, and malfunction.

[40 CFR §63.7121(b)]

d. Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the Permittee demonstrates to the Director that the facility and equipment were operating in accordance with 40 CFR 63.6(e)(1). The Director will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

[40 CFR §63.7121(d)]

e. If there was a deviation from an emission limitation set forth in Conditions VI.C.1.a through c at an affected source where the Permittee is not using a CMS to comply with the emission limitations, the compliance report shall contain the following information:

[40 CFR 63.7131(d)]

(1) The total operating time of each emission unit during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

f. If there was a deviation from an emission limitation set forth in Conditions VI.C.1.a through c at an affected source where the Permittee is using a CMS to comply with the emission limitations, the compliance report shall contain the following information:

[40 CFR 63.7131(e)]

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time and duration that each CMS was out-of-control, including the information in40 CFR 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total affected source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total emission unit operating time during that reporting period.

(8) A brief description of the process units.

(9) A brief description of the CMS.

(10) The date of the latest CMS certification or audit.

(11) A description of any changes in CMS, processes, or controls since the last reporting period.

g. If the Permittee submits a compliance report specified in Table 7 to 40 CFR 63 Subpart AAAAA along with, or as part of, the semiannual monitoring, and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation to report deviations from permit requirements to the Department.

[40 CFR 63.7131(e)]

8. Record Keeping Requirements

a. The Permittee shall keep a copy of each notification and report including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).

[40 CFR §63.7132(a)(1)]

b. The Permittee shall keep records specified in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

[40 CFR §63.7132(a)(2)]

c. The Permittee shall keep records of performance tests, performance evaluations, and opacity and VE observations as required in 40 CFR 63.10(b)(2)(viii).

[40 CFR §63.7132(a)(3)]

d. The Permittee shall keep records specified in 40 CFR 63.6(h)(6) for VE observations.

[40 CFR §63.7132(b)]

e. The Permittee shall keep records of all COM data, including records of installation, maintenance, and calibration.

[40 CFR 63.7132(c) Table 5, Item 4]

f. The Permittee shall keep records of all VE checks.

[40 CFR 63.7132(c) Table 6, Item 1]

g. The Permittee shall keep the records which document the basis for initial applicability determination as required under 40 CFR 63.7081.
[40 CFR 63.7132(d)]

h. The Permittee shall keep all records in a form suitable and readily available for expeditious review, according to 40 CFR 63.10 (b)(1).
[40 CFR 63.7133(a)]

i. The Permittee shall keep all records for a period of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
[40 CFR 63.7133(b)]

j. The Permittee shall keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).
[40 CFR 63.7133(c)]

9. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-82-720.B and 40 CFR 63.7090(a), 63.7090(b), 63.7100(d) and (e), 63.7111, 63.7112(a), 63.7112(b), 63.7112(c), 63.7112(d), 63.7112(e), 63.7112(f), 63.7112(h), 63.7113(f), 63.7113(g), 63.7120, 63.7121(b) , 63.7121(d), 63.7121(e), 63.7130(a), 63.7130(d), 63.7131, 63.7131(c) , 63.7131(d), 63.7131(e), 63.7131(f), 63.7132(a), 63.7132(b), 63.7132(c), 63.7132(d), 63.7133(a), 63.7133(b), and 63.7133(c).
[A.A.C. R18-2-325]

VII. FRONT LIME HANDLING SYSTEM, BACK LIME HANDLING SYSTEM, AND KILN DUST HANDLING SYSTEM

A. Applicability

This Section applies to all equipment in the Front Lime Handling System (FLHS), the Back Lime Handling System (BLHS), and the Kiln 1 and Kiln 2 Dust Handling System identified in Attachment "C" as subject this Section.

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The opacity of any plume or effluent emanating from the emissions units subject to this Section shall not exceed 20 percent.
[A.A.C. R18-2-702.B]

b. The Permittee shall not cause, allow, or permit the discharge of particulate matter into the atmosphere in any one hour from stacks at FLHS/DC 430, DC 437A-F, DC 419-5, DC 452, DC 762-1, BLHS/DC 414, DC-DS1 and Kiln 1 and Kiln 2 Dust Handling/DC 1-321, DC 2-321 in total quantities in excess of the amounts calculated by one of the following equations:
[A.A.C. R18-2-730.A.1]

(1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

$E = 4.10\ P^{0.67}$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

(2) For process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:

$E = 55.0\ P^{0.11} - 40$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

c. For the purpose of Condition VII.B.1.b, the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-730.b]

2. Air Pollution Control Requirements

At all times when any emission unit subject to this Section is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain and operate *the associated control measure/device identified in Attachment "C" in a manner consistent with good air pollution control practice for minimizing particulate matter emissions*.

[A.A.C. R18-2-306.A.3.c and -331.A.3.e]
[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting and Recordkeeping Requirements

a. The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.G of this Attachment, once every two weeks to monitor emissions from FLHS/DC 430, DC 437A-F, DC 419-5, DC 452, DC 762-1, DC-DS1, BLHS/DC 414, and Kiln 1 and Kiln 2 Dust Handling/DC 1-321 and DC 2-321 stacks and all identifiable emission points at the process sources under this Section.

[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall, once every month, conduct a Control Device

Monitoring and Maintenance Procedure, as defined in Condition I.F of this Attachment, for the control devices FLHS/DC 430, DC 437A-F, DC 419-5, DC 452, DC 762-1, DC-DS1, BLHS/DC 414, and Kiln 1 and Kiln 2 Dust Handling/DC 1-321 and DC 2-321.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-702.B, 730.A.1 and 730.B.

[A.A.C. R18-2-325]

VIII. HYDRATOR

A. Applicability

This Section applies to all the equipment that is part of the Hydrator System identified in Attachment "C" that is subject to this Section.

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The opacity of any plume or effluent emanating from the equipment subject to this Section shall not exceed 20 percent.

[A.A.C. R18-2-702.B]

b. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from DF 711, DC 721, and DC 750A stacks in total quantities in excess of the maximum allowable emissions calculated by the following equation:

[A.A.C. R18-2-720.B]

(1) For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

$E = 4.10\ P^{0.67}$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

(2) For process weight rate greater than 30 tons per hour, the maximum allowable emissions shall be determined by the following equation:

$E = 55.0\ P^{0.11} - 40$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

c. For the purposes of this Condition VIII.B.1.b, the total process weight rate from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

[A.A.C. R18-2-720.D]

d. *The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from the DF 711 stack in total quantities in excess of 5.71 pounds-mass per hour.*

[I.P. No. 65011 Condition B, A.A.C. R18-2-306.01.A, A.A.C. R18-2-331.A.3.e]
[Material permit conditions are indicated by underline and italics]

2. Air Pollution Control Requirements

At all times when any emission unit subject to this Section is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain *and operate the associated control measure/device identified in Attachment "C" in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.*

[A.A.C. R18-2-331.A.3.d and e, A.A.C. R18-2-306.A.2]
[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting and Recordkeeping Requirements

a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.G, once every two weeks to monitor emissions from all identifiable emission units listed under VIII.A including the DF 711, DC 721, and DC 750A stacks.

[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall, once every month, conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.F, for the control devices DF 711, DC 721 and DC 750A.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-702.B, 720.B, and 720.D, and with conditions of the Installation Permits No. 65011, and 1000988 for the stack emission sources under this Section.

[A.A.C. R18-2-325]

IX. REQUIREMENTS FOR DIESEL ENGINES NOT SUBJECT TO NSPS

A. Applicability

The Conditions of this Section apply to

1. Detroit Diesel Emergency Fire Pump Engine; and

2. Kiln 1 and Kiln 2 Pony Motors.

B. Fuel Limitations

1. The Permittee shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for sulfur content of non-road diesel fuel.

[A.A.C. R18-2-719.H]

2. Permit Shield

Compliance with the terms of this Part shall be deemed compliance with A.A.C. R18-2-719.H.

[A.A.C. R18-2-325]

C. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any generator sets affected under this Section, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity, measured in accordance with EPA Reference Method 9. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[A.A.C. R18-2-719.E]

b. The Permittee shall not cause or allow to be discharged into the atmosphere from the generator stacks affected under this Section, particulate matter in excess of the amount calculated by the following equation and rounded off to two decimal points:

[A.A.C. R18-2-719.C.1]

$E = 1.02Q^{0.769}$

Where:

E = The maximum allowable particulate emissions rate in pounds-mass per hour.

Q = The heat input in million Btu per hour.

c. For the purposes of this condition, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units at a plant or premises shall be used for determining the maximum

allowable amount of particulate matter which may be emitted.
[A.A.C. R18-2-719.B]

2. Monitoring and Recordkeeping Requirements

a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.G, once every two weeks when the generators are operating to monitor emissions from stacks of the Generator sets affected under this Section.
[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall keep records of a current, valid purchase contract, tariff sheet or transportation contract. The records shall contain information regarding the lower heating value of the fuel. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c and 306.A.4.a].

3. Permit Shield

Compliance with the terms of this Part shall be deemed compliance with A.A.C. R18-2-719.B, 719.C.1 and 719.E.
[A.A.C. R18-2-325]

D. Sulfur Dioxide

1. Emission Limitations and Standards

The Permittee shall not cause, allow, or permit emissions of more than 1.0 pound of sulfur dioxide per million Btu heat input from each generator set affected under this Section.
[A.A.C. R18-2-719.F]

2. Monitoring, Recordkeeping and Reporting Requirements

a. The Permittee shall keep records of fuel supplier certifications or other documentation listing the sulfur content to demonstrate compliance with the sulfur content limit specified in Condition IX.B.1 of this Attachment. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c and -719.I]

b. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.
[A.A.C. R18-2-719.J]

3. Permit Shield

Compliance with the terms of this Part shall be deemed compliance with A.A.C. R18-2-719.F, 719.I and 719.J.
[A.A.C. R18-2-325]

E. National Emission Standards for Hazardous Air Pollutant (NESHAP) Requirements

1. General Requirements

a. The Permittee shall operate and maintain at all times the engine including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[40 CFR 63.6605(b)]

b. The Permittee shall minimize the engine time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in shall apply.

[40 CFR 63.6625(h)]

c. The Permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

2. Requirements for Emergency Engines

a. Operation Requirements

(1) The Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6602, 63.6625(i) and 40 CFR 63, Subpart ZZZZ, Table 2c]

(a) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

(i) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

(ii) Viscosity: changed more than 20 percent from the viscosity of oil when new; and

(iii) Water Content: greater than 0.5 percent by volume.

If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the above limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. Records shall be kept of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the operation of the engine.

(b) The Permittee shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(c) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(2) If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Conditions IX.E.2.a(1)(a) through (c), or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated.

[40 CFR 63 Subpart ZZZZ, Table 2c]

(3) The Permittee shall operate the emergency engines according to the requirements in Conditions IX.E.2.a(3)(a) through (c) below. In order for the engines to be considered emergency stationary ICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance response, and operation in non-emergency situations for 50 hours per year, as described in these Conditions, is prohibited. If the emergency engine is not operated in accordance with the requirements in Conditions IX.E.2.a(3)(a) through (c) below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[40 CFR 60.6640 (f)]

(a) There is no time limit on the use of emergency engine in emergency situations.

[40 CFR 60.6640 (f)(1)]

(b) The Permittee may operate the emergency engine for any combination of the purposes specified in Condition in Conditions IX.E.2.a(3)(b)(i) for a maximum of 100 hours

per calendar year. Any non-emergency situations as allowed by Condition IX.E.2.a(3)(c) below counts as part of the 100 hours per calendar year allowed by this condition.

[40 CFR 63.6640(f)(2)]

(i) The Permittee may operate the emergency engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The Permittee may petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that the Federal, State, or local standards require maintenance and testing beyond 100 hours per year. Copies of records shall be made available to ADEQ upon request.

[40 CFR 63.6640 (f)(2)(i)]

(c) The Permittee may operate an emergency engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f)(3)]

(4) *The Permittee shall install a non-resettable hour meter if one is not already installed.*

[40 CFR 63.6625(f), R18-2-331.A.3.c]
[Material Permit Conditions are indicated by underline and italics]

b. Recordkeeping Requirements

(1) The Permittee shall keep records of the hours of operation of the RICE that is recorded through the non-resettable hour meter. Records shall include the date, start and stop times, hours spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[40 CFR 63.6655(f)]

(2) The Permittee shall keep records of the parameters that are analyzed and the results of the oil analysis, if any, and the oil changes for the engine.

[40 CFR 63.6625(i)]

(3) The Permittee shall keep the records of actions taken during periods of malfunction to minimize emissions in accordance with Condition IX.E.1.b, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655(a)(5)]

(4) The Permittee shall keep records of the maintenance conducted on the engine in order to demonstrate that the engine and after-treatment control device (if any) were operated and maintained in accordance with the Permittee's maintenance plan.

[40 CFR 63.6655(e)]

(5) The Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655(f)]

(6) The records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a)]

(7) The Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660(b)]

(8) The record shall be readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660(c)]

3. Requirements for Non-Emergency Compression Ignition Engines

a. Operation Requirements

The Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6602, and 40 CFR 63, Subpart ZZZZ, Table 2c]

(1) The Permittee shall change the oil and filter every 1,000 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described in Condition IX.E.2.a(1)(a). The oil analysis shall be performed at the same frequency specified for changing the oil.

(2) Every 1,000 hours of operation or annually, whichever comes first, the Permittee shall inspect and replace air cleaner as necessary.

(3) Every 500 hours of operation or annually, whichever comes first, the Permittee shall inspect all hoses and belts and replace as necessary.

b. Continuous Compliance Requirements

The Permittee shall demonstrate continuous compliance by operating and maintaining the engine according to the manufacturer's emission-related operation and maintenance instructions; or by developing and following its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions

[40 CFR 63.6640(a), Table 6 to 40 CFR 63 Subpart ZZZZ]

c. Recordkeeping Requirements

(1) The Permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that , the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee's own maintenance plan.

[40 CFR 63.6655(e)]

(2) The Permittee shall keep the records of actions taken during periods of malfunction to minimize emissions in accordance with Condition IX.E.1.b, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655(a)(5)]

(3) The Permittee shall keep records of the parameters that are analyzed and the results of the oil analysis, if any, and the oil changes for the engine.

[40 CFR 63.6625(i)]

(4) The records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a)]

(5) The Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660(b)]

(6) The record shall be readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660(c)]

4. Permit Shield

Compliance with the terms of this Part shall be deemed compliance with 40.CFR 63.6602, 63.6605(b), 63.6625(e), 63.6625(f), 63.6625(i), 63.6625(h), 63.6640(a), 63.6650(d), 63.6650(h), 63.6640(f), 63.6655(a)(5), 63.6655(e), 63.6655(f), 63.6660(a) through (c).

[A.A.C. R18-2-325]

X. REQUIREMENTS FOR ENGINES SUBJECT TO NSPS SUBPART IIII

A. Applicability

This Section applies to the <125kW Canyon Well Generator engine.

B. Operating Requirements

1. The Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 kW (25 HP) and less than 56 kW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

[40 CFR 60.4208(c)]

2. The Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 kW (75 HP) and less than 130 kW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

[40 CFR 60.4208(d)]

3. The Permittee shall operate and maintain the CI-ICE to comply with the emission standards as required in Condition X.D over the entire life of the engine.

[40 CFR 60.4206]

4. The Permittee shall operate and maintain the CI-ICE and any control device according to the manufacturer's emission-related written instructions.

[40 CFR 60.4211(a)(1)]

5. The Permittee shall change only those emission-related settings that are permitted by the manufacturer, or demonstrate compliance in accordance with Condition X.F.4.

[40 CFR 60.4211(a)(2)]

6. The Permittee shall meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.

[40 CFR 60.4211(a)(3)]

C. Fuel Requirements

The Permittee shall only burn diesel fuel that meets the following requirements of 40 CFR 80.510(b):

1. Sulfur content: 15 ppm maximum; and

2. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b)]

D. Emission Limitations and Standards

1. Nitrogen Oxides (NO_X)

[40 CFR 60.4204(a) and 40 CFR 60.4204(b), 40 CFR 60.4201(a)) and 40 CFR 1039.101]

For model year 2015 or later engines less than 130 kW but at least 56 kW, the Permittee shall not allow NOx emissions to exceed 0.40 g/kW-hr.

2. Nitrogen Oxides and Non-Methane Hydrocarbons (NMHC)

[40 CFR 60.4204(b), 40 CFR 60.4201(a), 40 CFR 1039.101 and 102]

a. 2014 and prior year engines with a power rating of 37≤kW<75, the Permittee shall not cause or allow to be discharged into the atmosphere any gases that contain NO_X and non-methane hydrocarbons in excess of 4.7 g/kW-hr.

b. 2014 and prior year engines with a power rating of 75≤kW<130, the Permittee shall not cause or allow to be discharged into the atmosphere any gases that contain NO_X and non-methane hydrocarbons in excess of 4.0 g/kW-hr.

c. For model year 2015 or later engines with a power rating of 37≤kW<56, the Permittee shall not cause or allow to be discharged into the atmosphere any gases that contain NO_X and non-methane hydrocarbons in excess of 4.7 g/kW-hr..

3. Carbon Monoxide

[40 CFR 60.4204(a), 40 CFR 60.4204(b), 40 CFR 60.4201(a), 40 CFR 1039.101 and 102]

The Permittee shall not cause or allow to be discharged into the atmosphere any gases which contain carbon monoxide in excess of 5.0 g/kW-hr.

4. Particulate Matter

[40 CFR 60.4204(b), 40 CFR 60.4201(a), 40 CFR 1039.101 and 102]

a. For engines with a power rating of 37≤kW<56, the Permittee shall not cause or allow to be discharged into the atmosphere any gases that contain particulate matter in excess of 0.03 g/kW-hr.

b. For engines with a power rating of 56≤kW<130, the Permittee shall not cause or allow to be discharged into the atmosphere any gases that contain particulate matter in excess of 0.03 g/kW-hr.

E. Air Pollution Control Requirements

If the engine is equipped with a diesel particulate filter, the Permittee shall install, operate and maintain *the particulate filter in accordance with good air pollution control practices for minimizing emissions*.

[A.A.C. R18-2-306.01 and -331.a.3.d and e]
[Material permit conditions are indicated by underline and italics]

F. Compliance Requirements

1. The Permittee shall only use a certified engine. The Permittee shall install and configure the engine to the manufacturer's specifications.

[40 CFR 60.4211(c)]

2. The Permittee shall maintain a copy of engine certifications or other documentation demonstrating that each engine complies with the applicable standards in this Permit, and shall make the documentation available to ADEQ upon request.

[A.A.C. R18-2-306.A.4]

3. If the Permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the Permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or changes the emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 CFR 60.4211(g)(1)]

G. Monitoring and Recordkeeping Requirements

1. *If the engine is equipped with a diesel particulate filter to comply with the particulate emission standards, the Permittee shall install a backpressure monitor that notifies the Permittee when the high backpressure limit of the engine is approached.*

[40 CFR 60.4209(b) and A.A.C. R18-2-331.a.3.c]
[Material permit conditions are indicated by underline and italics]

2. If the engine is equipped with a diesel particulate filter, the Permittee shall keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached.

[40 CFR 60.4214(c)]

H. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with 40 CFR 60.4201(a), 60.4204(a) and (b), 60.4206, 60.4207(b), 60.4209(b), 60.4211(a) and (c), 60.4211(g)(1) and 60.4214(c).

[A.A.C. R18-2-325]

XI. GASOLINE STORAGE TANK

A. Applicability

This Section applies to the 8,000 gallon gasoline storage tank.

B. Operating Limitations

1. Gasoline storage tank shall be equipped with a submerged filling device or acceptable equivalent, for control of hydrocarbon emissions.

[A.A.C. R18-2-710.B]

2. All pumps and compressors that handle gasoline shall be equipped with mechanical seals or other equipment of equal efficiency to prevent release of organic contaminants into the atmosphere.

[A.A.C. R18-2-710.D]

C. Monitoring and Recordkeeping Requirements

[A.A.C. R18-2-710.E]

The Permittee shall maintain a storage tank log showing the following:

1. The Permittee shall maintain a file of each type of petroleum liquid stored, the typical Reid vapor pressure of the petroleum liquid stored and the dates of storage. Dates on which the storage vessel is empty shall be shown.

2. The Permittee shall determine and record the average monthly storage temperature and true vapor pressure of the petroleum liquid stored at such temperature if either:

   a. The petroleum liquid has a true vapor pressure, as stored, greater than 26 mm Hg (0.5 psia) but less than 78 mm Hg (1.5 psia) and is stored in a storage vessel other than one equipped with a floating roof, a vapor recovery system or their equivalents; or

   b. The petroleum liquid has a true vapor pressure, as stored, greater than 470 mm Hg (9.1 psia) and is stored in a storage vessel other than one equipped with a vapor recovery system or its equivalent.

3. The average monthly storage temperature shall be an arithmetic average calculated for each calendar month, or portion thereof, if storage is for less than a month, from bulk liquid storage temperatures determined at least once every seven days.

4. The true vapor pressure shall be determined by the procedures in American Petroleum Institute Bulletin 2517, amended as of February 1980 (and no future editions), which is incorporated herein by reference and on file with the Office of

the Secretary of State. This procedure is dependent upon determination of the storage temperature and the Reid vapor pressure, which requires sampling of the petroleum liquids in the storage vessels. Unless the Director requires in specific cases that the stored petroleum liquid be sampled, the true vapor pressure may be determined by using the average monthly storage temperature and the typical Reid vapor pressure. For those liquids for which certified specifications limiting the Reid vapor pressure exist, the Reid vapor pressure may be used. For other liquids, supporting analytical data must be made available upon request to the Director when typical Reid vapor pressure is used.

D. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with the A.A.C. R18-2-710.D, 710.D and 710.E.

[A.A.C. R18-2-325]

XII. DIESEL STORAGE TANKS

A. Applicability

The Section is applicable to 10,000 gallon and 20,000 gallon diesel storage tanks 10 and 12.

B. Volatile Organic Compounds (VOCs)

1. The storage tank shall be equipped with a submerged filling device or acceptable equivalent, for control of hydrocarbon emissions.

[A.A.C. R18-2-306.A.2]

2. All pumps and compressors that handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent release of organic contaminants into the atmosphere.

[A.A.C. R18-2-306.A.2]

3. Materials including solvents or other volatile compounds, and other chemicals utilized in the processes under this Section shall be processed, stored, used, and transported in such a manner and by means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory.

[A.A.C. R18-2-730.F]

4. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

[A.A.C. R18-2-730.G]

C. Permit Shield

Compliance with the terms in this Section shall be deemed compliance with A.A.C. R18-2-730.F and G.

[A.A.C. R18-2-325]

XIII. HOT WATER PRESSURE WASHER

A. Applicability

This Section applies to the hot water pressure washer identified in Attachment "C" as subject to this Section.

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. The opacity of any plume or effluent emanating from the emissions units subject to this Section shall not exceed 15 percent.

[A.A.C. R18-2-724.J]

b. The Permittee shall not cause, allow, or permit the emission of particulate matter, caused by combustion of fuel, from any fuel-burning operation in excess of the amounts calculated by the following equation:

$E = 1.02Q^{0.769}$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

[A.A.C. R18-2-724.C.1]

c. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all fuel-burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

[A.A.C. R18-2-724.B]

2. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee shall conduct a Visible Emissions Observation Procedure as defined in Condition I.G of this Attachment once every two weeks.

[A.A.C R18-306.A.3.c]

C. Sulfur Dioxide (SO_2) Standards

1. Fuel Limitations

The Permittee shall not fire high sulfur diesel fuel in the hot-water pressure washer.
[A.A.C. R18-2-724.G]

2. Emission Limitations and Standards

The Permittee shall not emit more than 1.0 pounds of SO_2 per million BTU heat input.
[A.A.C. R18-2-724.E]

3. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee shall keep records of fuel supplier certifications or other documentation listing the sulfur content. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c]

D. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C.R18-2-724.B, 724.C.1, -724.E, -724.G, and 724.J.
[A.A.C. R18-2-325]

XIV. EPA FEDERAL IMPLEMENTATION PLAN REQUIREMENTS

A. Applicability

This section applies to NOx and SO_2 emission limits for Kiln 1 and Kiln 2 set forth by the EPA Federal Implementation Plan promulgated April 17, 2015.
[40 CFR 52.145]

B. Compliance Dates

1. The Permittee shall comply with the NOx emission limitations and other NOx-related requirements of this Section no later than September 4, 2017.
[40 CFR 52.145(i)(4)(i)]

2. The Permittee shall comply with the SO_2 emission limitations and other SO_2-related requirements of this section no later than March 3, 2016.
[40 CFR 52.145(i)(4)(ii)]

C. General Requirements

1. For the purpose of this Section, Kiln operating day means a 24-hour period between 12 midnight and the following midnight during which there is operation of Kiln 1, Kiln 2, or both kilns at any time. Kiln operation means any period when any raw materials are fed into the Kiln or any period when any combustion is occurring or fuel is being fired in the Kiln.
[40 CFR 52.145(i)(2)]

2. *The Permittee shall at all times, to the extent practicable, including periods of startup, shutdown, and malfunction,* maintain and *operate the kilns, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. Pollution control equipment shall be designed and capable of operating properly to minimize emissions during all expected operating conditions*. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPA Administrator, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspection of the kilns.

[40 CFR 52.145(i)(10)(i), A.A.C. R18-2-331.A.3.e, and 306.A.2]
[Material permit conditions are indicated by underline and italics]

3. *After completion of installation of ammonia injection on Kiln 1 and Kiln 2, the Permittee shall inject sufficient ammonia to achieve compliance with the NOx emission limits in Condition XIV.D.1 of this section for Kiln 1 and Kiln 2 while preventing excessive ammonia emissions.*

[40 CFR 52.145(i)(10)(ii), A.A.C. R18-2-331.A.3.d and e, and 306.A.2]
[Material permit conditions are indicated by underline and italics]

D. Nitrogen Oxides (NOx)

1. Emission Limitations

a. The Permittee shall not emit or cause to be emitted NOx emissions in excess of 3.80 pounds per ton of lime product (lb/ton) from Kiln 1 and 2.61 lb/ton of lime product from Kiln 2. Each emission limit shall be based on a 12-month rolling basis.

[40 CFR 52.145(i)(3)(i)]

b. The Permittee shall not emit or cause to be emitted NOx emissions in excess of 3.27 tons per day, combined from both kilns, based on a rolling 30-kiln-operating-day basis.

[40 CFR 52.145(i)(3)(ii)]

2. Monitoring Requirements

a. *At all times after the compliance dates in Condition XIV.B.1 of this section, the Permittee shall install, calibrate,* maintain, and operate *CEMS on Kilns 1 and 2 in full compliance with the requirements found at 40 CFR 60.13 and 40 CFR part 60, appendices B and F, to accurately measure diluent, stack gas volumetric flow rate, and concentration by volume of NO_x emissions into the atmosphere from kilns 1 and 2*.

[40 CFR 52.145(i)(6)(i), A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

b. The CEMS shall be used by the Permittee to determine compliance with the emission limitations in Condition XIV.D.1 of this Section, in combination with data on actual lime production.

[40 CFR 52.145(i)(6)(i)]

c. The Permittee shall operate the monitoring system and collect data at all required intervals at all times that an affected kiln is operating, except for

periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

[40 CFR 52.145(i)(6)(i)]

3. Compliance Requirements

a. The Permittee shall demonstrate compliance with the NO_x emission limits in Condition XIV.D.1.a of this section by calculating the 12-month rolling NOx emission rate for each kiln within 30 days following the end of each calendar month in accordance with the procedure below:

[40 CFR 52.145(i)(6)(iii)]

(1) Step One. Sum the hourly pounds of NOx emitted for the month just completed and the 11 months preceding the month just completed to calculate the total pounds of NOx emitted over the most recent 12-month period for that kiln.

(2) Step Two. Sum the total lime product, in tons, produced during the month just completed and the 11 months preceding the month just completed to calculate the total lime product produced over the most recent 12-month period for that kiln.

(3) Step Three. Divide the total pounds of NOx calculated from Step One by the total tons of lime product calculated from Step Two to calculate the 12-month rolling NOx emission rate in lb/ton lime for that kiln.

For each 12-month rolling NOx emission rate, the Permittee shall include all emissions and all lime product that occurred during all periods within the 12-month period, including emissions from startups, shutdowns, and malfunctions.

b. The Permittee shall demonstrate compliance with the NO_X emission limit described in Condition XIV.D.1.b of this section of this section shall be determined based on a rolling 30-kiln-operating-day basis as per the following procedure:

[40 CFR 52.145(i)(6)(v)]

(1) Step One. Sum the hourly pounds of NOx emitted from both kilns for the current kiln-operating-day and the preceding 29 kiln-operating-day period for both kilns.

(2) Step Two. Divide the total pounds of NOx calculated from Step One by 2000 to calculate the total tons of NOx emitted over the most recent 30-kiln-operating-day period.

(3) Step three. Divide the total tons of NOx calculated from Step Two by 30 to calculate the rolling 30-kilnoperating-day NOx emission rate for both kilns.

For each rolling 30-kiln-operating-day NOx emission rate, the Permittee shall include all emissions from both kilns during all periods within any kiln-operating-day, including emissions from startups, shutdowns, and malfunctions.

E. Sulfur Dioxide (SO_2)

1. Emission Limitations

a. The Permittee shall not emit or cause to be emitted SO_2 emissions in excess of 9.32 pounds per ton of lime product (lb/ton) from Kiln 1 and 9.73 lb/ton from Kiln 2. Each emission limit shall be based on a 12-month rolling basis.

[40 CFR 52.145(i)3(i)]

b. The Permittee shall not emit or cause to be emitted SO_2 emissions in excess of 10.10 tons per day, combined from both kilns, based on a rolling 30-kiln-operating-day basis.

[40 CFR 52.145(i)(3)(ii)]

2. Monitoring Requirements

a. *At all times after the compliance date in Condition XIV.B.2 of this section, the Permittee shall install, calibrate*, maintain, and operate *CEMS on Kilns 1 and 2 in full compliance with the requirements found at 40 CFR 60.13 and 40 CFR part 60, appendices B and F, to accurately measure diluent, stack gas volumetric flow rate, and concentration by volume of SO_2 emissions into the atmosphere from kilns 1 and 2*.

[40 CFR 52.145(i)(6)(i), A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

b. The CEMS shall be used by the Permittee to determine compliance with the emission limitations Conditions XIV.E.1 of this section, in combination with data on actual lime production.

[40 CFR 52.145(i)(6)(i)]

c. The Permittee shall operate the monitoring system and collect data at all required intervals at all times that an affected kiln is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

[40 CFR 52.145(i)(6)(i)]

3. Compliance Requirements

a. Compliance with the SO_2 emission limits described in Condition XIV.E.1.a of this section shall be determined based on a rolling 12-month basis. The Permittee shall calculate the 12-month rolling SO_2 emission rate for each kiln within 30 days following the end of each calendar month in accordance with the procedure below:

[40 CFR 52.145(i)(6)(iv)]

(1) Step One. Sum the hourly pounds of SO_2 emitted for the month just completed and the 11 months preceding the month just completed to calculate the total pounds of SO_2 emitted over the most recent 12-month period for that kiln.

(2) Step Two. Sum the total lime product, in tons, produced during the month just completed and the 11 months preceding the month just completed to calculate the total lime product produced over the most recent 12-month period for that kiln.

(3) Step Three. Divide the total pounds of SO_2 calculated from Step One by the total tons of lime product calculated from Step Two to calculate the 12-month rolling SO_2 emission rate in lb/ton lime for that kiln.

For each 12-month rolling SO_2 emission rate, the Permittee shall include all emissions and all lime product that occurred during all periods within the 12-month period, including emissions from startups, shutdowns, and malfunctions.

b. Compliance with the SO_2 emission limit described in Condition XIV.E.1.b of this section shall be determined based on a rolling 30-kiln-operating-day basis. The Permittee shall calculate the rolling 30-kiln-operating-day SO_2 emission rate for the kilns each kiln operating day in accordance with the following procedure:

[40 CFR 52.145(i)(6)(vi)]

(1) Step One. Sum the hourly pounds of SO_2 emitted from both kilns for the current kiln-operating-day and the preceding 29 kiln-operating-day period for both kilns.

(2) Step Two. Divide the total pounds of SO_2 calculated from Step One by 2000 to calculate the total tons of SO_2 emitted over the most recent 30-kiln-operating-day period.

(3) Step three. Divide the total tons of SO_2 calculated from Step Two by 30 to calculate the rolling 30-kilnoperating-day SO_2 emission rate for both kilns.

For each 30-kiln-operating-day SO_2 emission rate, the Permittee shall include all emissions from both kilns during all periods within any kiln-operating-day, including emissions from startups, shutdowns, and malfunctions.

F. Ammonia Consumption Monitoring Requirement

Upon and after the completion of installation of ammonia injection on kilns, the Permittee shall install, and thereafter maintain and operate, instrumentation to continuously monitor and record levels of ammonia consumption for each kiln.

[40 CFR 52.145(i)(6)(ii)]

G. Recordkeeping Requirements

1. The Permittee shall maintain the following records for at least five years:
[40 CFR 52.145(i)(7)]

   a. All CEMS data, including the date, place, and time of sampling or measurement; parameters sampled or measured; and results.
   [40 CFR 52.145(i)(7)(i)]

   b. All records of lime production.
   [40 CFR 52.145(i)(7)(ii)]

   c. Monthly rolling 12-month emission rates of NO_X and SO_2 calculated in accordance with Conditions XIV.D.3.a and XIV.E.3.a of this section
   [40 CFR 52.145(i)(7)(iii)]

   d. Daily rolling 30-kiln-operating-day emission rates of NO_X and SO_2 accordance with Conditions XIV.D.3.b and 0 of this section
   [40 CFR 52.145(i)(7)(iv)]

   e. Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records specified by 40 CFR part 60, Appendix F, Procedure 1, as well as the following:
   [40 CFR 52.145(i)(7)(v)]

      (1) The occurrence and duration of any startup, shutdown, or malfunction, performance testing, evaluations, calibrations, checks, adjustments maintenance, duration of any periods during which a CEMS or COMS is inoperative, and corresponding emission measurements.

      (2) Date, place, and time of measurement or monitoring equipment maintenance activity;

      (3) Operating conditions at the time of measurement or monitoring equipment maintenance activity;

      (4) Date, place, name of company or entity that performed the measurement or monitoring equipment maintenance activity and the methods used; and

      (5) Results of the measurement or monitoring equipment maintenance.

   f. Records of ammonia consumption as recorded by the instrumentation required in Condition XIV.F of this section
   [40 CFR 52.145(i)(7)(vi)]

   g. Records of all major maintenance activities conducted on emission units, air pollution control equipment, CEMS, and lime production measurement devices.
   [40 CFR 52.145(i)(7)(vii)]

h. All other records specified by 40 CFR part 60, Appendix F, Procedure 1.
[40 CFR 52.145(i)(7)(viii)]

H. Reporting Requirements
[40 CFR 70.6(a)(3)(iii)]

1. The Permittee shall submit any data that are required under this section in Excel format. The reports required under Conditions XIV.H.1.a through h of this section shall be submitted within 30 days after the applicable compliance date(s) in Condition B of this section and at least semiannually thereafter, within 30 days after the end of a semiannual period. The Permittee may submit reports more frequently than semiannually for the purposes of synchronizing reports required under this section with other reporting requirements, such as the Title V monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), but at no point shall the duration of a semiannual period exceed six months.
[40 CFR 52.145(i)(8)]

a. Prior to commencing construction of the ammonia injection system, the Permittee shall submit to EPA a summary report of the design of the SNCR system. Elements of this summary report shall include:
[40 CFR 52.145(i)(8)(i)]

(1) Reagent type,

(2) Description of the locations selected for reagent injection,

(3) Reagent injection rate (expressed as a molar ratio of reagent to NOx),

(4) Equipment list,

(5) Equipment arrangement, and

(6) A summary of kiln characteristics that were relied upon as the design basis for the SNCR system.

b. By October 3, 2017, the Permittee shall submit to EPA a summary of any process improvement or debugging activities that were performed on the SNCR system. Elements of this summary report shall include:
[40 CFR 52.145(i)(8)(ii)]

(1) Description of each process adjustment performed on the SNCR system,

(2) A discussion of whether the adjustment affected NO_X emission rate (including CEMS data that may have been recorded while the adjustment was in progress),

(3) A description of the range (if applicable) over which the adjustment was examined, and

(4) A discussion of how the adjustment will be reflected or accounted for in kiln operating practices.

(5) In addition, to the extent that the Permittee evaluates the impact of varying reagent injection rate on NOx emissions, the Permittee shall include the following information:

(a) The range of reagent injection rates evaluated (expressed as a molar ratio of reagent to average NOx concentration),

(b) Reagent injection rate,

(c) Average NOx concentration,

(d) Lime production rate,

(e) Kiln flue gas temperature, and

(f) the presence of any detached plumes from the kiln exhaust.

c. The Permittee shall submit a report that lists the daily rolling 30-kiln-operating-day emission rates for NOx and SO_2, calculated in accordance with Conditions XIV.D.3.a and XIV.E.3.a respectively of this section.
[40 CFR 52.145(i)(8)(iii)]

d. The Permittee shall submit a report that lists the monthly rolling 12month emission rates for NOx and SO_2, calculated in accordance with Conditions XIV.D.3.b and 0 respectively of this section.
[40 CFR 52.145(i)(8)(iv)]

e. The Permittee shall submit excess emissions reports for NOx and SO_2 limits. Excess emissions means emissions that exceed any of the emissions limits specified in Conditions XIV.D.1 and XIV.E.1 respectively of this section. The reports shall include:
[40 CFR 52.145(i)(8)(v)]

(1) The magnitude, date(s), and duration of each period of excess emissions;

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the kiln;

(3) The nature and cause of any malfunction (if known); and

(4) The corrective action taken or preventative measures adopted.

f. The Permittee shall submit a summary of CEMS operation, to include:
[40 CFR 52.145(i)(8)(vi)]

(1) Dates and duration of each period during which the CEMS was inoperative (except for zero and span adjustments and calibration checks),

(2) Reason(s) why the CEMS was inoperative and steps taken to prevent recurrence, and

(3) Any CEMS repairs or adjustments.

g. The Permittee shall submit results of all CEMS performance tests required by 40 CFR Part 60, Appendix F, Procedure 1 (Relative Accuracy Test Audits, Relative Accuracy Audits, and Cylinder Gas Audits).
[40 CFR 52.145(i)(8)(vii)]

h. When no excess emissions have occurred or the CEMS has not been inoperative, repaired, or adjusted during the reporting period, the owner/operator shall state such information in the semiannual report.
[40 CFR 52.145(i)(8)(viii)]

2. The Permittee shall submit all reports to the Director, Enforcement Division, U.S. Environmental Protection Agency, Region 9, electronically via email to aeo_r9@epa.gov.
[40 CFR 52.145(i)(8)]

I. Notifications

The Permittee shall submit all notifications required under this section to the Director, Enforcement Division (Mail Code ENF– 2–1), U.S. Environmental Protection Agency, Region 9, 75 Hawthorne Street, San Francisco, California 94105–3901.
[40 CFR 52.145(i)(9)]

1. The Permittee shall submit notification of commencement of construction of any equipment which is being constructed to comply with the NOx emission limits.
[40 CFR 52.145(i)(9)(i)]

2. The Permittee shall submit semiannual progress reports on construction of any such equipment.
[40 CFR 52.145(i)(9)(ii)]

3. The Permittee shall submit notification of initial startup of any such equipment.
[40 CFR 52.145(i)(9)(iii)]

J. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with the EPA FIP requirements in 40 CFR Part 52.145(i), Subpart D – Arizona.
[A.A.C. R18-2-325]

XV. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Section applies to any source of fugitive dust in the facility.

B. Particulate Matter and Opacity

Open Areas, Roadways & Streets, Storage Piles, and Material Handling

1. Emission Limitations/Standards

a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9.

[A.A.C. R18-2-614]

b. The Permittee shall not cause, allow or permit visible emissions from any fugitive dust point source, in excess of 20% opacity.

[A.A.C. R18-2-702.B]

c. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

(1) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

[A.A.C. R18-2-604.A]

(2) Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means;

[A.A.C. R18-2-604.B]

(3) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway is repaired, constructed, or reconstructed;

[A.A.C. R18-2-605.A]

(4) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust;

[A.A.C. R18-2-605.B]

(5) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust;

[A.A.C. R18-2-606]

(6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored;

[A.A.C. R18-2-607.A]

(7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use

of spray bars and wetting agents;

[A.A.C. R18-2-607.B]

(8) Any other method as proposed by the Permittee and approved by the Director.

[A.A.C. R18-2-306.A.3.c]

d. In conjunction with the requirements in Condition XV.B.1.c of this Attachment, the Permittee shall also implement an approved Dust Control Plan referenced in Condition I.C of this Attachment which identifies the areas to be controlled, the methods to be utilized, and cleanup frequency.

[A.A.C. R18-2-306.A.3.c]

2. Air Pollution Control Requirements

Haul Roads and Storage Piles

Water, or an equivalent control, shall be used to control visible emissions from haul roads and storage piles.

[A.A.C. R18-2-306.A.2 and -331.A.3.d]
[Material Permit Condition is indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

a. The Permittee shall maintain records of the dates on which any of the activities listed in Conditions XV.B.1.c(1) through XV.B.1.c(8) above were performed and the control measures that were adopted.

[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.G, once every two weeks to monitor emissions from all activities covered by this Section.

[A.A.C. R18-2-306.A.3.c]

C. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-604.A, A.A.C. R18-2-604.B, A.A.C. R18-2-605, A.A.C. R18-2-606, A.A.C. R18-2-607, A.A.C. R18-2-608 and A.A.C. R18-2-612.

[A.A.C. R18-2-325]

XVI. MOBILE SOURCE REQUIREMENTS

A. Applicability

The requirements of this Section are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.90.

[A.A.C. R18-2-801.A]

B. Particulate Matter and Opacity

1. Emission Limitations/Standards

a. Off-Road Machinery

The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway.

[A.A.C. R18-2-802.A and -802.B]

b. Roadway and Site Cleaning Machinery

(1) The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[A.A.C. R18-2-804.A]

(2) The Permittee shall take reasonable precautions, such as the use of dust suppressants, before the cleaning of a site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means.

[A.A.C. R18-2-804.B]

c. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%.

[A.A.C. R18-2-801.B]

2. Recordkeeping Requirement

The Permittee shall keep a record of all emissions related maintenance activities performed on the Permittee's mobile sources stationed at the facility as per manufacturer's specifications.

[A.A.C. R18-2-306.A.5.a]

3. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-801, A.A.C. R18-2-802.A, A.A.C. R18-2-804.A and A.A.C. R18-2-804.B.

[A.A.C. R18-2-325]

XVII. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Limitations/Standards

The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

(1) Wet blasting;

(2) Effective enclosures with necessary dust collecting equipment; or

(3) Any other method approved by the Director.

[A.A.C. R18-2-726]

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity, as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall make a record of the following:

a. The date the project was conducted;

b. The duration of the project; and

c. Type of control measures employed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the terms on this Part shall be deemed compliance with A.A.C. R18-2-726 and A.A.C. R18-2-702.B.

[A.A.C.R18-2-325]

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

(1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.
[A.A.C.R18-2-727.A]

(2) The Permittee or their designated contractor shall not either:

(a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

(b) Thin or dilute any architectural coating with a photochemically reactive solvent.
[A.A.C.R18-2-727.B]

(3) For the purposes of Condition XVII.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions XVII.B.1.a(3)(a) through XVII.B.1.a(3)(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

(a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

(b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
[A.A.C.R18-2-727.C]

(4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions XVII.B.1.a(3)(a) through XVII.B.1.a(3)(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
[A.A.C.R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

(1) Each time a spray painting project is conducted, the Permittee shall make a record of the following:

(a) The date the project was conducted;

(b) The duration of the project;

(c) Type of control measures employed;

(d) Material Safety Data Sheets for all paints and solvents used in the project; and

(e) The amount of paint consumed during the project.

(2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition XVII.B.1.b(1) above.

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with the terms on this Part shall be deemed compliance with A.A.C.R18-2-727.

[A.A.C.R18-2-325]

2. Opacity

a. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity, as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B]

b. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C.R18-2-702.B.

[A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the terms on this Part shall be deemed compliance with A.A.C. R18-2-1101.A.8.

[A.A.C. R18-2-325]

ATTACHMENT "C": EQUIPMENT LIST

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Crushing and Screening Equipment					
Dump Hopper	1,400	NA	NA	NA	Section II
Apron Feeder 102	1,400	NA	NA	NA	Section II
Cleanup Belt Conveyor 102B	1,400	NA	NA	Pre-1983	Section II
Belt Conveyor 104	1,400	Hi-Line	42"	1973	Section II
Grizzley 102A	1,260	NA	NA	Pre-1983	Section II
Jaw Crusher 103	1260	KVS	48"x60"/554-P-73	1973	Section II
Belt Conveyor 202	1,400	Hi-Line	42"	Pre-1983	Section II
Primary Screen 108	1,400	Symons	GP-2820 / GP-8153	1999 (Like Kind Repl.)	Section II
Belt Conveyor 235	0.04	Hi-Line	24"	1976	Section II
Belt Conveyor 223	630	Hi-Line	24"	1976	Section II
Surge Bin 107	60 ton	KVS	NA	1973	Section II
Vibrating Feeder 201	1,050	Syntron	RF-120	1973	Section II
Belt Conveyor 202	1,050	Hi-Line	42"	Pre-1983	Section II
Vibrating Screen 203	1,260	Tyler	F-900, 6"x16"	1973	Section II
Chat Silo 210	500 ton	KVS	NA	1973	Section II
Belt Conveyor 208	1,120	Hi-Line	24"	1973	Section II
Belt Conveyor 222	300	Hi-Line	24"	1976	Section II
Cone Crusher 206	465	Symons	5 ½" 5947	1981	Section II
Belt Conveyor 204	1,400	Hi-Line	30"	1973	Section II
Belt Conveyor 207	1,050	Hi-Line	30"	1973	Section II
Vibrating Screen 205	1,050	Tyler	F-900, 6"x16"	1973	Section II
Belt Conveyor 215	1,400	Hi-Line	42"	1976	Section II
Vibrating Feeders 216-	1,400	Syntron	MF-200-B	Pre-1983	Section II

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
1,2,3					
Belt Conveyor 217	1,400	Hi-Line	42”	1976	Section II
Vibrating Screen 218	1,050	Tyler	F-1406-X, 6”x16”	1976	Section II
Belt Conveyor 222	300	Hi-Line	24”	1976	Section II
Belt Conveyor 209	630	Hi-Line	24”	1973	Section II
Belt Conveyor 220	910	Hi-Line	24”	1976	Section II
Cone Crusher 219	302	Symons	5803	1977	Section II
Belt Conveyor 224	910	Hi-Line	30”	1976	Section II
Belt Conveyor 202	910	Hi-Line	42”	1973	Section II
Belt Conveyor 226	630	NA	NA	1999	Section III
Portable Grizzly	25	NA	NA	Pre-1983	Section II
Dust Collector DC 234	4,853 dscfm	Pneumafil	PCFH 284	NA	Section II
Dust Collector DC 213	895 dscfm	Mikro-Pulsaire	64-S-8-20B	1973	Section II
Dust Collector DC 206-D	5108 dscfm	Industrial Accessories	120TB-BVT-225:S6	NA	Section II
Dust Collector DC 219-D	1532 dscfm	Industrial Accessories	120TB-BVT-100:S6	NA	Section II
Kiln Feed System Equipment					
Vibrating Feeders 301-1 to 301-6 (6 Feeders)	393	Syntron	RF-40 and RF-80	1976	Section II
Belt Conveyor 302	393	Hi-Line	30”	1973 (extended in 1976)	Section II
Vibrating Screen 328	393	Tyler	R-1005-CS-G	1997	Section III
Belt Conveyor 329	393	Hi-Line	24”	1973 (extended in 1976)	Section VI
Belt Conveyor 303-A	236	Hi-Line	24”	1976	Section VI
Stone Bin 1-304	800 ton	KVS	NA	1973	Section VI

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Stone Bin 2-304	700 ton	KVS	NA	1976	Section VI
Solid Fuel Handling Equipment					
Solid Fuel Hopper	220	KVS	NA	1973	Section IV
Track Hopper	220	KVS	NA	1973	Section IV
Feeders 504A, B	220	Syntron	RF-20	1973	Section IV
Crusher 505	220	McLanahan	36” x 18”/1400-73	1973	Section IV
Weigh Belt 504C	220	NA	NA	2001	Section V
Bucket Elevator 521	220	Rex	1618-05M	1973	Section IV
Belt Conveyor 514	220	Hi-Line	24”	1973 (extended 1976)	Section IV
Roll Crusher 522	220	KVS	36”x36” / 891-P-76	1973	Section IV
Belt Conveyor 516	220	KVS	24”	1976	Section V
Fuel Bin 2-517	650 ton	KVS	NA	1976	Section V
Fuel Bin 1-508	500 ton	KVS	NA	1973	Section IV
Weigh Feeder 1-601	14	Ramsey	10-301	1973	Section IV
Screw Conveyor 1-613	14	Martin Conveyor	14”	2005	Section V
Ball Mill 1-602	28	KVS	9’x12’6”	1973	Section IV
Classifier 1-604	28	Vari-Mesh	No. 6	1973	Section IV
Weigh Feeder 2-601	21	Ramsey	10-301	1976	Section V
Ball Mill 2-602	42	KVS	10’x10’6”	1976	Section V
Classifier 2-604	42	Vari-Mesh	NA	1976	Section V
Dust Collector 527	4,795 dscfm	Mikro-Pulsaire	100-S-10-20	1973	Section IV
Kiln 1 and Kiln 2 System Equipment					
Kiln 1	39.38	KVS	15’dia x 155’	1973	Sections VI and XIV
Kiln 1 Multicyclone 1-319	200,000 acfm	Research Cottrell	CY-119	1973	Section VI

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Kiln 1 Baghouse BGH1	82,612 dscfm	BoldEco	FBCL-14-2-18-16-10	2006	Section VI
Kiln 2	58.96	KVS	17'diax178.5'	1976	Sections VI and XIV
Kiln 2 Multicyclone 2-319	200,000 acfm	Cyclo-Trell	Type C-24 / 41-311738	1976	Section VI
Kiln 2 Baghouse BGH2	109431 dscfm	Amerex RexPulse	10RP-14-324D6	1998	Section VI
Contact Cooler 1-310	39.38	Ferenco	Knimes	1995	Section VI
Contact Cooler 2-310	58.96	KVS	20' dia.	1976	Section VI
Kiln 1 and Kiln 2 Dust Handling					
Screw Conveyor 1-316E	12	Bold-Eco	10"	2006	Section VII
Screw Conveyor 1-316D	12	Bold-Eco	10"	2006	Section VII
Screw Conveyor 1-316C	24	Bold-Eco	12"	2006	Section VII
Screw Conveyor 1-316B	24	Bold-Eco	12"	2006	Section VII
Screw Conveyor 1-316A	24	Ft Worth Steel	12"	1973	Section VII
Screw Conveyor 1-318/1-316	24	Ft Worth Steel	12"	1973	Section VII
Bin Elevator 1-317	24	Rexnord	1110-01	1973	Section VII
Dust Bin 1-318	50 ton	KVS	NA	1973	Section VII
Screw Conveyor 2-316	24	Ft Worth Steel	9"	1976	Section VII
Dust Collector DC 1-321	1,324 dscfm	Mikro-Pulsaire	36S-8-30	1973	Section VII
Screw Conveyor 2-316G	36	NA	NA	1998	Section VII
Screw Conveyor 2-316F	36	NA	NA	1998	Section VII
Screw Conveyor 2-316E	36	NA	NA	1998	Section VII
Screw Conveyor 2-316D	36	NA	NA	1998	Section VII
Screw Conveyor 2-316C	36	Ft. Worth Steel	16"	1976	Section VII
Screw Conveyor 2-316A	36	Ft. Worth Steel	9"	1976	Section VII
Screw Conveyor 2-316B	36	Ft. Worth Steel	12"	1976	Section VII

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Screw Conveyor 2-316C	36	Ft. Worth Steel	16”	1976	Section VII
Bin Elevator 2-317	36	Rexnord	1112-01	1976	Section VII
Dust Bin 2-318	150 ton	KVS	NA	1976	Section VII
Dust Collector DC 2-321	2,331 dscfm	Mikro-Pulsaire	64S-8-20B	1976	Section VII
Screw Conveyor 461	36	Mesco Conveying Corp	UT 40-40-08	1994	Section VII
Front Lime Handling System					
Vibrating Feeders 340A, B, C, D	39.38	NA	NA	1995	Section VII
Apron Conveyor 420	39.38	Rexnord	24”	1976	Section VII
Vibrating Feeder 2-311	58.96	KVS	60”	1976	Section VII
Apron Conveyor 420	58.96	Rexnord	24”	1976	Section VII
Dust Collector DC 762-1	3,464 dscfm	Pneumafil	PKE-24	NA	Section VII
Apron Conveyor 421	98	Rexnord	42”	1976	Section VII
Apron Conveyor 421	0.0004	Rexnord	42”	1976	Section VII
Dust Collector DC 419-5	925 dscfm	Mikro-Pulsaire	16S-8-30	NA	Section VII
Bucket Elevator 423	98	Rexnord	1100 Series	1976	Section VII
Bucket Elevator 424-1	98	Rexnord	1100 Series	1976	Section VII
Bucket Elevator 424-2	98	Rexnord	1100 Series	1976	Section VII
Screen 432	197	Tyler	5”x14” 3S R-1406X/50-2685	1976	Section VII
Undersize Lime Hopper	10	NA	NA	1999	Section VII
Screw Conveyor 430-A	0.006	NA	NA	NA	Section VII
Screw Conveyor 428	36	Purvis Bearing	20”	1999	Section VII
Dust Collector DC 430	6,568 dscfm	Mikro-Pulsaire	196S-10-TRH	1976	Section VII
Screw Conveyor 428	10	Purvis Bearing	20”	1999	Section VII
Bucket Elevator 424-C	10	Rexnord	1100 Series	1999	Section VII
Screw Conveyor 427	10	Ft. Worth Steel	24”	1976	Section VII

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Product Silo 3A (428-3)	3,300 ton capacity	KVS	45’ dia.	1976	Section VII
Hammer mill 422	98	NA	NA	1999	Section VII
Screw Conveyor 413	98	Ft. Worth Steel	16”	1973	Section VII
Bucket Elevator 423	98	Rexnord	1100 Series	NA	Section VII
Screw Conveyor 425	98	Ft. Worth Steel	24”	1976	Section VII
Screw Conveyors 426	98	Ft. Worth Steel	24”	1976	Section VII
Product Silo 1A (428-1)	3,300 ton capacity	KVS	45’ dia	1976	Section VII
Product Silo 2A(428-2)	3,300 ton capacity	KVS	45’ dia	1976	Section VII
Dust Collector DC 437B	925 dscfm	Mikro-Pulsaire	25S-8-30	1976	Section VII
Vibrating Feeder 443-1	167	FMC	Syntron RF-80 30” x 54”	1976	Section VII
Vibrating Feeder 443-2	167	FMC	Syntron MF-200-B 48” x 84”	1976	Section VII
Vibrating Feeder 443-3	167	FMC	Syntron MF-200-B 48” x 84”	1976	Section VII
Belt Conveyor 435	167	Hi-Line	42”	1976	Section VII
Vibrating Feeder 433-1	83	FMC	Syntron RF-80 30” x 54”	1976	Section VII
Vibrating Feeder 433-2	83	FMC	Syntron RF-80 30” x 54”	1976	Section VII
Vibrating Feeder 433-3	83	FMC	Syntron RF-80 30” x 54”	1976	Section VII
Belt Conveyor 434	83	Hi-Line	30”	1976	Section VII
Screw Conveyor 441	10	NA	NA	NA	Section VII
Screw Conveyor 470	10	Purvis Bearing	9”	1999	Section VII
Screw Conveyor 471	10	Purvis Bearing	9”	1999	Section VII
Bucket Elevator 423	10	Rexnord	1100 Series	NA	Section VII
Screw Conveyor 444	25	NA	NA	NA	Section VII
Belt Conveyor 434	25	Hi-Line	30”	1976	Section VII

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Dust Recovery Bin BN 464	16 ton	Silotek	NA	1994	Section VII
Screw Conveyor 465	36	NA	9”	1994	Section VII
Screw Conveyor 466	36	NA	9”	1994	Section VII
Belt Conveyor 434	36	Hi-Line	30”	1976	Section VII
Belt Conveyor 435	36	Hi-Line	42”	1976	Section VII
Dust Collector DC 452	1,122 dscfm	Pneumafil	PCFH 8BV	1994	Section VII
Dust Collector DC 437A	809 dscfm	Mikro-Pulsaire	25S-8-30	1976	Section VII
Dust Collector DC 437C	809 dscfm	Mikro-Pulsaire	36S-10-30	1976	Section VII
Dust Collector DC 437D	1,858 dscfm	Mikro-Pulsaire	49S-8-20	NA	Section VII
Dust Collector DC 437E	1,858 dscfm	Mikro-Pulsaire	49S-8-20	NA	Section VII
Dust Collector DC 437F	1,858 dscfm	Mikro-Pulsaire	49S-8-20	NA	Section VII
Dolo QL Silo	60 tons	DSS	WAM 400 PJ	2012	Section VII
Dust Collector DC DS1	2400 cfm	DSS	550 BBL Port	2012	Section VII
Back Lime Handling System					
Belt Conveyor 401	58.96	Hi-Line	24”	1973 (extended 1976)	Section VII
Bucket Elevator 403	98	Rexnord	1612-02	1973	Section VII
Off-Load Hopper	100	NA	NA	NA	Section VII
Screw Conveyor 412	100	Ft. Worth Steel	16”	1973	Section VII
Bucket Elevator 403	100	Rexnord	1612-02	1973	Section VII
Hammer Mill 402-2	98	Williams	C-32 Slugger/14399	1992	Section VII
Bucket Elevators 406E, W	98	Rexnord	1612-01	1973	Section VII
Screw Conveyor 443	250	Conveyor Inc.	24”	1991	Section VII
Roll Crusher 444	250	McLanahan	24” x36”/903060	1991	Section VII
Screw Conveyor 445	250	Conveyors Inc.	24”	1991	Section VII

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Bucket Elevator 446	250	NA	NA	1991	Section VII
Screen 404	250	Tyler	F-600, 4’ x 12’/20423	1973	Section VII
Hammermill 405	98	Williams	340R/15562	1998	Section VII
Screw Conveyor 447	98	Conveyors, Inc.	16”	1991	Section VII
Bucket Elevator 446	98	NA	NA	1991	Section VII
Screw Conveyor 408	98	NA	NA	1994	Section VII
Screw Conveyors 408A, B, C	98	Thomas Conveyors	20”	1994	Section VII
Silos 1, 3, 4, 5	950 ton	KVS	NA	1973	Section VII
Silo 2	950 ton	KVS	NA	1973	Section VII
Belt Conveyor 402	98	NA	NA	NA	Section VII
Dust Collector DC 414	4,940 dscfm	Mikro-Pulsaire	1F-2-48	1973	Section VII
Screw Conveyor 414-2	0.23	NA	NA	NA	Section VII
Filling Supersacks	2	NA	NA	NA	Section VII
Hydrator System					
Screw Conveyor 701	15	NA	NA	1988	Section VIII
Screw Conveyor 702	15	NA	NA	1988	Section VIII
Quicklime Feed Surge Bin 703	15	3 Tons	NA	1988	Section VIII
Belt Conveyor 704	15	Ramsey	Belt Scale System/ Scale 10-101R1/Integrator 2001	1988	Section VIII
Screw Conveyor 707	15	NA	NA	1988	Section VIII
Pug Mill 708	15	Ehrsam	Twin Paddle	1988	Section VIII
Seasoning Chamber 710	15	18’ x 8’ Diameters	NA	1988	Section VIII
Ducon Slaker Scrubber DF 711	3,909 dscfm	Ducon Wet Scrubber	UW-4(48)	1988	Section VIII
Screw Conveyor 712	16	NA	NA	1999	Section VIII

Equipment	Rated Capacity (tons/hour or indicated units)	Make	Model/Serial No.	Date of Manufacture	Applicable Section
Bucket Elevator 719	31	NA	NA	1999	Section VIII
Air Separator 715	31	Sturtevant	Whirlwind 12”/3086	1999	Section VIII
Screw Conveyor 718	16	NA	NA	1999	Section VIII
Dust Collector DC 721	6,192 dscfm	American Air Filter	Millenium	1999	Section VIII
Bucket Elevator 713	31	NA	NA	1988	Section VIII
Hammermill 717	16	Williams	Meteor Mill, Size 18	1999	Section VIII
Hydrated Lime Silo 6	31	KVS	950 Ton Bin/#409-6	1973	Section VIII
Dust Collector 750A	2,000 dscfm	Industrial Accessories	108TB-BHI-36-S6	NA	Section VIII
Screw Conveyor 750	31	NA	NA	NA	Section VIII
Diesel Generators/Engines					
Canyon Well Generator	<125 kW	Generac	361PSL1647/ 4045HFG92D	2013	Section X
Detroit Diesel Emergency Fire Pump Engine	140 hp	Detroit Diesel	5043-7001/4D-104282	1975	Section IX
Kiln 1 Pony Motor	80 hp	Cummins	4B3.9C/44641085	1991	Section IX
Kiln 2 Pony Motor	80 hp	Cummins	4B3.9C/46178244	2002	Section IX
Hot Water Pressure Washer	768,000 btu	Hotsey	5730SS/PW16	2012	Section XIII
Gasoline Storage Tank #11	8,000 gallons	NA	NA	NA	Section XI
Diesel Storage Tank #12	20,000 gallons	NA	NA	NA	Section XII
Diesel Storage Tank #10	10,000 gallons	NA	NA	NA	Section XII