

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY CLASS I PERMIT

COMPANY: Chemical Lime Company, Nelson Lime Plant

FACILITY: Nelson Lime Plant

PERMIT #: 42782

DATE ISSUED: August 8, 2011 **DATE EXPIRES:** August 8, 2016

SUMMARY

This Class I permit is issued to Chemical Lime Company/Nelson Lime Plant, the Permittee, for operation of its limestone processing and lime manufacturing plant located approximately six miles east of Peach Springs in Yavapai County, Arizona. The limestone processing operation consists of a quarry area, a crushing and screening plant, and auxiliary operations. The lime manufacturing operation consists of pre-kiln limestone handling, two lime kilns, post-kiln lime handling, a hydrator, two peak demand generators, truck and rail loadout facilities, and solid fuel handling. Air pollution control equipment applied at the Nelson Lime Plant includes a number of baghouses, two multicyclone dust collectors, and a Ducon wet scrubber to control particulate matter emissions.

This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. All terms and conditions in this permit are enforceable by the Administrator of the U.S. Environmental Protection Agency except as otherwise provided in this Permit.

The potential to emit of the following pollutants are greater than major source thresholds: (i) particulate matter with an aerodynamic diameter less than 10 microns (PM_{10}), (ii) sulfur dioxide (SO_2), (iii) nitrogen oxides (NO_x), and (iv) carbon monoxide (CO). Additionally, 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(64), and requires a Class I permit pursuant to A.A.C. R18-302(B)(1)(a).

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ATTACHMENT "A": GENERAL CONDITIONS

Air Quality Control Permit No. 42782 For Nelson Lime Plant

I. PERMIT EXPIRATION AND RENEWAL

[A.R.S. § 49-426.F; A.A.C. R18-2-304.C.2; A.A.C. R18-2-306.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; A.A.C. R18-2-306.A.8.b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona air quality statutes and air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and 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; A.A.C. R18-2-321.A.1.c; A.A.C. R18-2-321.A.1.d; A.A.C. R18-2-321.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.

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- 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; A.A.C. R18-2-326]

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; A.A.C. R18-2-327.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; A.A.C. R18-2-309.2.c; A.A.C. R18-2-309.2.d; A.A.C. R18-2-309.5.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

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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, and whether the methods or other means provide continuous or intermittent data;
- 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;

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- 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]

- 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:
 - i. 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
 - ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a.i above.
 - b. The report shall contain the following information:
 - i. Identity of each stack or other emission point where the excess emissions occurred;
 - ii. 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;

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- iii. Date, time and duration, or expected duration, of the excess emissions;
- iv. Identity of the equipment from which the excess emissions emanated;
- v. Nature and cause of such emissions;
- vi. 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
- vii. 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.

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- 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

[A.R.S. § 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.

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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 Arizona Administrative Code 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

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- a. Except as provided in Condition XII.E.3.b, 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:
 - i. The excess emissions could not have been prevented through careful and prudent planning and design;
 - ii. 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;
 - iii. 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;
 - iv. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - v. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - vi. 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 Arizona Administrative Code that could be attributed to the emitting source;
 - vii. All emissions monitoring systems were kept in operation if at all practicable; and
 - viii. 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.

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5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3, 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; A.A.C. R18-2-306.A.8.e]

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- 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. R18-2-317.01; A.A.C. R18-2-318; A.A.C. R18-2-319, and A.A.C. R18-2-320]

- A. 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:
 - 1. Administrative Permit Amendment (A.A.C. R18-2-318);
 - 2. Minor Permit Revision (A.A.C. R18-2-319); and
 - 3. Significant Permit Revision (A.A.C. R18-2-320)
- B. The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

[A.A.C. R18-2-306.A.4; 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(19);
 - 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.

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- 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, 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, other than implementation of an alternate to Conditions XVII.A and XVII.B.
- 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. Requirement

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.

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C. Methods and Procedures

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 shall 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, shall be submitted.

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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 any 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.

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ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 42782 For Nelson Lime Plant

I. GENERAL REQUIREMENTS

A. The Permittee shall have on site or on call a person that is certified in EPA Reference Method 9.

[A.A.C. R18-2-306.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 not cause, allow, or permit gaseous or odorous materials to be emitted from equipment, operations or premises under its control in such quantities or concentrations as to cause air pollution.

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

D. The Permittee shall within 180 days of issuance of this renewal permit submit a new Dust Control Plan to be approved by the Director. The Dust Control Plan shall address the annual inspection requirements for each baghouse and dust collector included in the Equipment List of Attachment "C". Until the new Dust Control Plan is approved, the Permittee shall follow the requirements of the current approved Dust Control Plan. Changes to an approved Dust Control Plan shall not be implemented unless approved by the Director.

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

E. 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.]

F. The Permittee shall submit the following reports:

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]

G. 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.

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- 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:
 - i. The Permittee shall conduct an inspection of the baghouse cleaning system and fan.
 - ii. 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.

H. Visible Emissions Observation Procedure:

- 1. The Permittee shall implement the approved Visual Observation Plan dated September 22, 2009 and approved by the Director. 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:

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- 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.
- I. Where a stack, vent, or other outlet at the facility, which is not otherwise subject to the Existing Stationary Source Performance Standards, the New Source Performance Standards, or the National Emission Standards for Hazardous Air Pollutants of Title 18, Chapter 2 of the Arizona Administrative Code, is at such a level that fumes, gas mist, or 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 owner or operator thereof 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]

J. Alternate Operating Scenario for Crusher 206 at the Crushing and Screening Plant

The Permittee shall not operate the Symons Crusher 206 at the same time as either Gyratory Crusher 206N or Gyratory Crusher 206S.

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 Rule A.A.C. R18-2-720.

B. Particulate Matter (PM/PM₁₀) 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]

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i. 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.

ii. 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

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, as specified in the equipment list in Attachment "C", in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

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

- 3. Monitoring, Reporting, Recordkeeping
 - a. The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.H 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)]

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b. The Permittee shall conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.G 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)]

4. 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).

[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 to NSPS Subpart OOO.

B. Particulate Matter (PM/PM10) and Opacity

1. Emission Limitations and Standards

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

- a. The <u>Permittee shall not cause to be discharged into the atmosphere from any affected facility fugitive emissions which exhibit opacity greater than the limits listed below.</u> Compliance with the opacity standard shall be determined by conducting observations in accordance with EPA Reference Method 9 in 40 CFR 60, Appendix A. Emissions in excess of the level of the emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the emission limit.
 - i. The opacity of affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 shall not exceed 7 percent for stack emissions and shall not exceed 10 percent for fugitive emissions.
 - ii. The opacity of affected facilities that commenced construction, modification, or reconstruction on or after April 22, 2008 shall not exceed 7 percent for dry control devices on individual enclosed storage bins and shall not exceed 7 percent for fugitive emissions.
- b. The Permittee shall not cause to be discharged into the atmosphere any stack emissions from emission units subject to this Section which contain particulate matter in excess of the limits listed below. Emissions in excess of the level of the emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the emission limit.

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- i. Affected facilities that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008 shall meet a PM limit of 0.05 g/dscm.
- ii. Affected facilities that commence construction, modification, or reconstruction on or after April 22, 2008 shall meet a PM limit of 0.032 g/dscm.

[40 CFR § 60.672(a), § 60.11(b) and (c)]

2. Air Pollution Control

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, as specified in the equipment list in Attachment "C", in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

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

- 3. Monitoring, Reporting, Recordkeeping
 - a. For affected facilities for which construction, modification, or reconstruction began on or after April 22, 2008:
 - i. When wet suppression is used to control emissions, the Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if water is not flowing properly. The Permittee shall record in a logbook each inspection, including the date and any corrective action taken in the logbook required by 40 CFR 60.676(b).

[40 CFR § 60.674(b)]

ii. When a baghouse is used to control emissions, the Permittee shall either conduct quarterly 30-minute visible emissions inspections using EPA Method 22 while the baghouse is operating, install a bag leak detection system, or follow the continuous compliance requirements of 40 CFR Part 63 Subpart AAAAA Table 6, row 1, items (i) through (iii).

[40 CFR § 60.674(c), (d), and (e)]

(a) If during a Method 22 inspection any visible emissions are observed, the Permittee shall initiate corrective action within 24 hours to return the baghouse to normal operation. The permittee shall record in the logbook required by 40 CFR 60.676(b) each inspection, including the date and any corrective action taken.

[40 CFR § 60.674(c)]

(b) A bag leak detection system shall meet the specifications and requirements of 40 CFR 60.674(d)(1) through (3).

[40 CFR § 60.674(d)]

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(c) For each bag leak detection system installed and operated according to 40 CFR 60.674(d), the Permittee shall keep the records specified in 40 CFR 60.676(b)(2)(i) through (iii).

[40 CFR § 60.676(b)]

- iii. The Permittee shall conduct an initial performance test according to 40 CFR 60.8 or 60.11 as applicable and 60.675. The permittee shall repeat the performance test for opacity within 5 years of the previous performance test for fugitive emissions from affected facilities without water sprays. If the facility is controlled by water carryover from upstream water sprays that are inspected according to 60.674(b) and 60.676(b) then the test frequency shall be according to 60.674(b)(1).
- iv. The Permittee shall submit reports as required by 40 CFR 60.676.
- b. For affected facilities not subject to III.B.3.a, the Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.H of this Attachment, once every two weeks to monitor emissions from material transfer points at the process sources affected under this Section.

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

4. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with 40 CFR 60.672(a) and (b), 60.674, and 60.676 for the process sources affected under this Section.

[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 Rule A.A.C. R18-2-716

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:
 - i. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum

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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.

ii. 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)]

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. R18-2-716(D)]

2. Air Pollution Control

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, as specified in the equipment list in Attachment "C", in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

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

- 3. Monitoring, Reporting, Recordkeeping
 - a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.H 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.G for baghouse DC 527.

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c. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Part I.H of this Attachment, once every two weeks to monitor emissions from the entrance and exit points of the solid fuel tunnel.

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

4. Permit Shield

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

[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 NSPS Subpart Y.

B. Emission Limitations and Standards

1. Particulate Matter and Opacity

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. The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, or malfunction..

[40 CFR § 60.254(a), § 60.11(b) and (c)]

2. Air Pollution Control

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, as specified in the equipment list in Attachment "C", in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

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

[40 CFR § 60.11(d)]

3. Monitoring, Reporting, Recordkeeping

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

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

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4. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with 40 CFR § 60.254(a) for the process sources affected under the Section.

[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 identified in Attachment "C" as subject to 40 CFR §63 Subpart AAAAA or A.A.C. R18-2-720.

B. General Requirements

- 1. Operating Requirements
 - a. Operations, Maintenance and Monitoring (OM&M) Plan

[40 CFR 63.7100(d)]

- i. 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.
- ii. The OM&M Plan must 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:

- i. Fuel oil:
- ii. Coal;
- iii. Petroleum coke;
- iv. Any combination of i though iii 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 (PM/PM₁₀) and Opacity

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

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 Stone Bin 2-304, Stone Bin 1-304, Belt Conveyor 329, and Weigh Belt 303A must not exceed 10 percent opacity.

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

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.i.

[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 and the Multicyclone 1-319 in a manner consistent with good air pollution control practice for minimizing particulate emissions.

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

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

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

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 VI.C.2.b above, and record the results of the inspection.

[40 CFR 63.7113(f)]

- b. Continuous Opacity Monitoring System (COMS) Requirements
 - i. <u>The Permittee shall calibrate</u>, 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)]

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

ii. The COMS under Condition VI.C.4.b.i above 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 their permitting authority.

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

- iii. The COMS under Condition VI.C.4.b.i 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.

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(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 the previous paragraph. 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]

- i. 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.
- ii. 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.

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- iii. 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.
- iv. 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.
- v. 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.

5. Reporting 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 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]

i. 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)]

ii. Consistent with §§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 §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)]

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

[40 CFR 63.7131(c), 63.7131(d), 63.7131(e)]

(a) Company name and address.

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- (b) 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.
- (c) Date of report and beginning and ending dates of the reporting period.
- (d) 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).
- (e) 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.
- (f) 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.

[40 CFR 63.7131(a) Table 7, Item 2]

(g) If there was a deviation from an emission limitation set forth in VI.C.1 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)]

- (i) The total operating time of each emission unit during the reporting period.
- (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (h) If there was a deviation from an emission limitation set forth in VI.C.1 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)]

- (i) The date and time that each malfunction started and stopped.
- (ii) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

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- (iii) The date, time and duration that each CMS was outof-control, including the information in §63.8(c)(8).
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) 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.
- (viii) A brief description of the process units.
 - (ix) A brief description of the CMS.
 - (x) The date of the latest CMS certification or audit.
- (xi) A description of any changes in CMS, processes, or controls since the last reporting period.

6. Record Keeping Requirements

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

 [40 CFR §63.7132(a)(1)]
- b. The Permittee shall keep records specified in §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 §63.10(b)(2)(viii).

[40 CFR §63.7132(a)(3)]

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

[40 CFR §63.7132(b)]

The Permittee shall keep records of all COM data, including records of e. 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]

The Permittee shall keep the records which document the basis for initial g. applicability determination as required under §63.7081.

[40 CFR 63.7132(d)]

The Permittee shall keep all records in a form suitable and readily h. available for expeditious review, according to §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)]

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

[40 CFR 63.7133(c)]

7. Performance Testing Requirements

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

[40 CFR 63.7111]

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 §63.7(b)(1).

[40 CFR 63.7130(d)]

The Permittee shall conduct each performance test according to the c. requirements in 40 CFR 63.7(e)(1) and in section VI.C.7.h below.

[40 CFR 63.7112(b)]

d. 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)]

e. 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)]

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

[40 CFR 63.7112(e)]

$$E = \binom{C_k Q_k}{PK}$$

Permit No. 42782 Page 32 of 81 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)

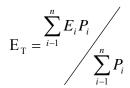
Qk = Volumetric flow rate of kiln effluent gas, dry standard cubic feet per hour.

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

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

g. 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)]



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

- h. Performance Testing Requirements for Kiln 1 and Kiln 2
 - i. The Permittee shall determine the mass rate of stone feed to the kiln during the kiln PM emissions test using any suitable device.

 [40 CFR 63.7112(a) Table 4, Item 7]
 - ii. The Permittee shall calibrate and maintain the device used to comply with condition VI.C.7.h.i 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]

iii. 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]

i. 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]

- i. The Permittee shall conduct opacity observations of the above emissions points using EPA Reference Method 9.
- ii. 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.
- j. The Permittee shall document in complete test report the following information:

[40 CFR 63.7112(h)]

- i. A description of the process and the air pollution control system
- ii. Sampling location descriptions;
- iii. A description of sampling and analytical procedures and any modification to standard procedures;
- iv. Test results, including opacity;
- v. Quality assurance procedures and results;
- vi. Records of operating conditions during the test, preparation of standards, and calibration procedures;
- vii. Raw data sheets for field sampling and field and laboratory analysis;
- viii. Documentation of calculations
- ix. All data recorded and used to establish operating limits; and
- x. Any other information required by the test method

8. Permit Shield

Compliance with the terms of this Part shall be deemed compliance with A.A.C. R18-82-720 and 40 CFR 63.7090(a), 63.7090(b), 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), 63.7121(b) , 63.7121(d), 63.7121(e), 63.7130(a), 63.7130(d), 63.7131(a), 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 SUBJECT TO A.A.C. R18-2-730

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 to A.A.C. R18-2-730.

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B. Particulate Matter (PM/PM₁₀) 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, 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,-730.B]

i. 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.

ii. 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.

- iii. 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.
- 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.

[Material permit conditions are indicated by underline and italics]

3. Monitoring, Reporting and Recordkeeping

a. The Permittee shall conduct a Visible Emission Observation Procedure, as defined in Condition I.H 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, 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.G of this Attachment, for the control devices FLHS/DC 430, DC 437A-F, DC 419-5, DC 452, DC 762-1, 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]

4. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-702(B) and A.A.C. R18-2-730(A)(1) for the sources affected under this Section.

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

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, -720.D]

i. 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:

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

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

ii. 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.

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

[Material permit conditions are indicated by underline and italics]

[A.A.C. R18-2-331.A.3.e]

[I.P. No. 65011 Condition B and A.A.C. R18-2-306.01.A]

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.

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

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

- 3. Monitoring, Reporting and Recordkeeping
 - a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.H, 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.G, for the control devices DF 711, DC 721 and DC 750A.

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

4. Permit Shield

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Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-702(B), 720(B)(1), 720(H), 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. DIESEL GENERATORS

A. Applicability

The conditions of Section IX apply to the North Electric Generator and the South Electric Generator. The conditions of this Section conditionally apply to the Canyon Well Generator if it is not subject to the requirements of Section X or XI.

B. Operating Requirements

1. Fuel Limitations

a. The Permittee shall burn only No. 2 diesel fuel in the generator sets affected under this Section;

[I.P. No. 1226, Att. "B", Condition V]

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

[voluntary limit] [A.A.C. R18-2-701(25) and 719(H)]

c. The total amount of diesel fuel consumed in the North and South Generator sets combined shall not exceed 164 gallons in any one (1) hour and 143,500 gallons during any calendar year.

[I.P. No. 1226, Att. "B", Condition VI]

2. Operating Hours Limitation

The operating hours of the North or South Generator sets each shall not exceed 875 hours per year.

[I.P. No. 1226, Att. "B", Condition VII]

3. Monitoring and Recordkeeping Requirements

a. The Permittee shall conduct a Visible Emissions Observation Procedure, as defined in Condition I.H, 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 maintain records of fuel deliveries. These records shall include documentation that the fuel meets the requirements of Condition IX.B.1.b.

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

c. The Permittee shall maintain records of the diesel fuel feed rate to the North and South Generator sets in gallons per hour and gallons per year.

[I.P. No. 1226, Att. "B", Condition VI]

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d. The Permittee shall maintain daily records of the dates and hours of operation of the North or South Generator set.

[I.P. No. 1226, Att. "B", Condition VII]

C. Particulate Matter and Opacity

Emission Limitations and Standards

1. 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]

2. 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.

3. 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]

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

E. Nitrogen Oxides

1. Emission Limitations and Standards

The Permittee shall not cause or allow to be discharged into the atmosphere from the North or South Generator set each, any gases which contain nitrogen oxides (NO_x) in excess of 44.8 pounds per hour and 19.6 tons per year respectively. Any average of three EPA Method 7 runs during which the average NO_x emissions exceed this limit shall constitute excess NO_x emission.

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2. Performance Testing

The Permittee shall conduct, at least once during the permit term, performance tests for nitrogen oxides exhausted from stacks of the North and South Generator sets, using EPA Reference Method 7 listed in 40 CFR 60, Appendix A. All performance tests shall be conducted while firing diesel fuel at the maximum operating capacity of the unit being tested. The Permittee shall follow the procedural requirements for performance testing outlined under Section XVIII, Attachment "A" of this Permit.

[I.P. No. 1226, Att. "B", Condition IV]

F. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with A.A.C. R18-2-719(B), 719(C)(1), 719(E), 719(F), 719(H), 719(I) and 719(J), and conditions stipulated in Installation Permit No. 1226, Attachment "B" for the North and South generator sets.

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

X. COMPRESSION IGNITION ENGINES SUBJECT TO NESHAP ZZZZ

1. **Applicability**

The Permittee shall comply with the terms of this Section no later than May 3, 2013 for all compression-ignition engines. When the Permittee utilizes an engine of 500 hp or less for the Canyon Well Generator for which construction commenced on or after June 12, 2006, the Permittee shall comply with this section by instead complying with Section XI of this Attachment for that engine. [40 CFR 63.6595]

2. General Requirements

Fuel Limitations a.

For engines greater than 300 hp, the Permittee shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

[40 CFR 63.6604]

Operating and Emission Limitations b.

i. The Permittee shall be in compliance with the applicable emission limitations of this Section at all times.

[40 CFR 63.6605(a)]

At all times the Permittee shall operate and maintain the CI ii. engines, 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)]

iii. For engines greater than 500 hp, the Permittee shall limit the concentration of CO in the exhaust of each of the generators to 23 ppmvd or less at 15 percent O₂, or reduce CO emissions by 70 percent or more.

[40 CFR 63.6600(d)(Table 2c)(Item 5)]

- For engines greater than or equal to 100 hp but not greater than 300 hp, the Permittee shall limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O₂.

 [40 CFR 63.6602 (Table 2c, Item 3)]
- v. For engines less than 100 hp, the Permittee shall perform the following unless utilizing an oil analysis program as described in 40 CFR 63.6625(h)(i):
 - (a) Change oil and filter every 1,000 hours of operation or annually, whichever comes first, and
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6602 (Table 2c, Item 2)]

- vi. The Permittee shall follow the requirements below for engines that do not have a closed crankcase ventilation system. The Permittee shall follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters.

 [40 CFR 63.6625(g)]
 - (a) The Permittee shall install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
 - (b) The Permittee shall install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.
- vii. The Permittee shall minimize the engine's 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 apply.

[40 CFR 63.6625(h)]

3. Air Pollution Control Requirements

a. The Permittee shall comply with the following if using an oxidation catalyst to comply with the requirement to reduce CO emissions or limit the concentration of CO in the exhaust:

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i. The Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the performance test.

[40 CFR 63.6600(d)(Table 2b, Item 1a)]

ii. The Permittee shall maintain the temperature of the stationary RICE exhaust such that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

[40 CFR 63.6600(d)(Table 2b, Item 1b)]

- b. For engines greater than 500 hp:
 - i. If reducing CO emissions using an oxidation catalyst, the Permittee shall:
 - (a) Install a continuous parameter monitoring system (CPMS) to continuously monitor catalyst inlet temperature according to 40 CFR §63.6625(b).

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

[40 CFR 63.6625(b), (Table 5)(Item 1)]

(b) Install a temperature measurement device that meets the requirements of 40 CFR §63.6625(k).

> [Material permit conditions are indicated by underline and italics] [A.A.C. R18-2-331(A)(3)(d) and (e)] [63.6625(k)]

(c) Collect the catalyst inlet temperature data and reduce these data to 4-hour rolling averages that demonstrate compliance with the operating limitation for catalyst inlet temperature.

[40 CFR 63.6640(a), (Table 6)(Item 10(a)(ii), (iii), and (iv)]

(d) Measure the pressure drop across the catalyst once per month and demonstrate that it is within the operating limitation established during the performance test.

[40 CFR 63.6640(a), (Table 6)(Item 10(a)(v)]

- ii. If reducing CO emissions but not using an oxidation catalyst, the Permittee shall:
 - (a) Install a CPMS to continuously monitor operating parameters approved by the Director according to the requirements of 40 CFR 63.6625(b).

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

(b) [40 CFR 63.6625(b), (Table 5)(Item 2)]Collect any approved operating parameters according to 40 CFR 63.6625(b) and reduce these data to 4-hour rolling averages that demonstrate compliance with the operating limitations for the operating parameters established during the performance test.

Permit No. 42782 Page 42 of 81 iii. If reducing CO emissions and using an oxidation catalyst and a CEMS, the Permittee shall continuously monitor CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements of 63.6625(a).

[40 CFR 63.6625(a), (Table 5)(Item 1)]

c. For engines greater than or equal to 500 hp that do not use an oxidation catalyst to comply with the emission limitation to reduce CO, the Permittee shall petition the Director as described in 40 CFR §63.6620(g) or (h) for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The initial performance test shall not be conducted until after the petition has been approved by the Director.

[40 CFR 63.6620(f)]

d. A petition to the Director for operating limitations or no operating limitations shall include the information from 40 CFR 63.6620(g) or 63.6630(h), respectively.

[40 CFR 63.6620(g) and (h)]

e. For each engine less than 100 hp, the Permittee shall operate and maintain the engine and after-treatment control device, if any, according to the manufacturer's emission-related operation and maintenance instructions, or develop and follow a maintenance plan that 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) and 6640(a), (Table 6)(Item 9(a)]

4. Performance Testing Requirements

a. The Permittee shall conduct an initial performance test on each engine 100 hp or larger within 180 days after the compliance date specified in Condition X.1

[40 CFR 63.6610(a) and 6612(a)]

- b. The Permittee shall conduct subsequent performance tests on engines greater than 500 hp every 8,760 hours or 3 years, whichever comes first. [40 CFR §63.6615 (Table 3, Item 4) and 6640(a) (Table 6, Items 10(a)(i) and 11(a)(i)]
- c. Testing shall be conducted in accordance with 40 CFR §63.6610, Table 4, Item 1 if reducing CO emissions, or Item 3 if limiting the concentration of CO in the exhaust. Testing shall be conducted in accordance with 40 CFR §63.6620.

[40 CFR §63.6610, 6615(Table 3)(Item 4), and 6620]

5. Reporting and Recordkeeping Requirements

a. The Permittee shall submit a semiannual compliance certification in accordance with Condition VII.A of Attachment "A" for the reporting requirements of this Section. The compliance certification shall include all applicable elements of 40 CFR §63.6650.

[40 CFR 63.6650(b)(5)]

b. For engines over 500 hp, the Permittee shall report each instance in which the facility did not meet the requirements in Table 8 of 40 CFR 63 Subpart ZZZZ.

[40 CFR 63.6640(e)]

c. The Permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified in the applicable Subpart for all engines 100 hp or more.

[40 CFR 63.6645(a)(3)]

d. If a new engine 100 hp or greater but not greater than 500 hp is installed, the Permittee shall submit an Initial Notification not later than 120 after becoming subject to this Section.

[40 CFR 63.6645(e)

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

[40 CFR 63.6645(g)]

f. The Permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(i).

[40 CFR 63.6645(h)]

g. The Permittee shall submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2).

[40 CFR 63.6645(h)(2)]

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

[40 CFR 63.6660(a)]

i. 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)]

j. The Permittee shall keep each record 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)]

k. The Permittee shall keep records as required by 40 CFR §63.6655(a), (e), and (f).

[40 CFR 63.6655(a), (e), and (f)]

6. Permit Shield

Compliance with the conditions in this Part shall be deemed compliance with 40 CFR 63.6595, 63.6600, 63.6604, 63.6605(b), 63.6610(a), 63.6615, 63.6620(a), 63.6620(d), 63.6620(e), 63.6620(f), 63.6620(g), 63.6620(h), 63.6620(i), 63.6625(g), 63.6625(h), 63.6625(k), 63.6640(a), 63.6640(e), 63.6645(a),

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

XI. COMPRESSION IGNITION ENGINES SUBJECT TO NSPS IIII

A. Applicability

This Section applies to the ≤125kW Canyon Well Generator engine (model year and size varies depending on unit in place but will not exceed 125 kW) if the date of manufacture is after April 1, 2006 or if the engine was modified or reconstructed after July 11, 2005.

B. General Requirements

1. Operating Requirements

a. The Permittee shall operate and maintain each compression ignition engine over its entire life according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer and shall only change those engine settings that are permitted by the manufacturer. A copy of the instructions or procedures shall be kept onsite and made available to ADEQ upon request.

[40 CFR 60.4206, 60.4211(a) and A.A.C. R18-2-306.A.3]

- b. The Permittee shall not remove or disable a device or element of design that may affect an engine's emission level. This prohibition does not apply during any of the following situations.
 - i. During repairs. The Permittee shall return the engine to proper functioning when the repairs are complete.

[40 CFR 60.4211(a), and 40 CFR 1068.101(b)(1)(i)]

ii. While the engine is modified as necessary to respond to a temporary emergency. The Permittee shall return the engine to proper functioning as soon as possible.

[40 CFR 60.4211(a), and 40 CFR 1068.101(b)(1)(ii)]

- c. The Permittee shall not install an engine part that bypasses, impairs, defeats or disables an engine's control of emissions of any pollutant.

 [40 CFR 60.4211(a), and 40 CFR 1068.101(b)(2)]
- d. The Permittee shall follow the requirements of CFR 1068.120 during a rebuild of an engine.

[40 CFR 60.4211(a), 40 CFR 1068.120]

e. After December 31, 2008, the Permittee shall not install an engine that does not meet the applicable requirements for 2007 model year engines. After December 31, 2013, the Permittee shall not install an engine that does not meet the applicable requirements for 2012 model year non-emergency engines. These requirements do not apply to engines that have been modified or reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location

[40 CFR 60.4208(a), (d), and (h)]

2. Fuel Requirements

- a. The Permittee shall only burn diesel fuel that meets the following requirements of 40 CFR 80.510(b):
 - i. Sulfur content: 15 ppm maximum; and
 - ii. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b)]

3. Monitoring and Recordkeeping Requirements

a. If the Permittee operates a pre-2007 model year stationary compression ignition internal combustion, the Permittee shall demonstrate compliance according to one of the methods specified below:

[40 CFR 60.4211(b)]

- i. Utilizing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications.
- ii. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test shall have been conducted using the methods specified in this 40 CFR 60.4212 or 4213, and the methods shall have been followed correctly.
- iii. Keeping records of engine manufacturer data indicating compliance with the standards.
- iv. Keeping records of control device vendor data indicating compliance with the standards.
- v. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.
- b. If utilizing a 2007 or later model year engine, the Permittee shall only use a certified engine. The Permittee shall install and configure the engine to the manufacturer's specifications.

[A.A.C. R18-2-325 and 40 CFR 60.4211(c)]

c. 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]

d. If the Permittee chooses to demonstrate compliance with the emission limits by conducting performance testing as allowed by Section XI.B.3.a of this Permit, the tests shall be conducted in accordance with 40 CFR 60.4212.

[40 CFR 60.4212]

C. Nitrogen Oxides (NO_X)

1. Emission Limitations and Standards

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

- a. For a pre-2007 model year engine less than 130 kW but at least 37 kW, the Permittee shall not cause or allow to be discharged into the atmosphere any gases which contain nitrogen oxides (NO_X) in excess of 9.2 gram per kilowatt hour.
- b. For model year 2015 or later engines less than 130 kW but at least 37 kW, the Permittee shall not allow NOx emissions from to exceed the Tier 4 standards established in Table 1 of 40 CFR §1039.101.

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

1. Emission Limitations and Standards

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

- a. For model year 2007 engines with a power rating of $37 \le kW < 75$, 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 7.5 grams per kilowatt hour (g/kW-hr).
- b. For model year 2008 through 2014 engines with a power rating of $37 \le kW < 75$, 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.
- c. For model year 2007 through 2014 engines with a power rating of $75 \le kW < 130$, 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.
- d. For model year 2015 or later engines with a power rating of 37≤kW<75, the Permittee shall not allow NMHC emissions to exceed the applicable Tier 4 standards established in Table 1 of 40 CFR §1039.101.

E. Carbon Monoxide

1. Emission Limitations and Standards

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

- a. For model year 2008 through 2014 engines with a power rating of 37≤kW<130, 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.
- b. For model year 2015 or later engines with a power rating of 37≤kW<75, the Permittee shall not allow CO emissions to exceed the applicable Tier 4 standards established in Table 1 of 40 CFR §1039.101.

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F. Particulate Matter

1. Emission Limitations and Standards

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

- a. For model year 2007 through 2014 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 particulate matter in excess of 0.4 g/kW-hr.
- b. For model year 2007 through 2014 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 particulate matter in excess of 0.3 g/kW-hr/
- c. After model year 2014, the Permittee shall not allow PM emission from engines with a power rating of 37≤kW<75 to exceed the Tier 4 standards established in Table 1 of 40 CFR §1039.101.

2. Air Pollution Control Requirements

If applicable, the <u>Permittee shall</u> maintain and <u>operate the particulate filter in accordance with good air pollution control practices for minimizing emissions.</u>

[A.A.C. R18-2-306.01 and -331.a.3.d and e]

[Material permit conditions are indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

a. 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]

b. 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)]

G. Permit Shield

Compliance with the conditions of the Section shall be deemed compliance with 40 CFR 60.4204(a) and (b), 60.4206, 60.4207(b), 60.4208(a), (d), and (g), 60.4209(b), 60.4211(a) (b), and (c), 60.4212, and 60.4214(c).

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

XII. GASOLINE AND DIESEL STORAGE AND DISPENSING FACILITIES

A. Gasoline Storage Tank 11 (8,000 Gallon)

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

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1. Operating Requirements

- a. The Gasoline Storage Tank 11 shall be equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions.
- b. All facilities for dock loading of gasoline shall provide for submerged filling or acceptable equivalent for control of hydrocarbon emissions.
- c. All pumps and compressors associated with Tank 11 which handle volatile organic compounds shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere.
- 2. Monitoring and Recordkeeping Requirements

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

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

- a. 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.
- b. 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:
 - i. 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
 - ii. 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.
- c. 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.
- d. 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

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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.

3. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with the requirement(s) of A.A.C. R18-2-710(B) through (E).

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

B. NSPS Requirement for Diesel Storage Tank 12 and Alternate Diesel Storage Tank (20,000 Gallon)

1. The Permittee shall keep readily accessible records showing the dimension of each diesel storage vessel affected under this Condition XII.B and an analysis showing the capacity of the storage vessel. The records shall be kept for the life of the storage vessels.

[40 CFR 60.116b(a) and (b)]

2. Permit Shield

Compliance with the terms of this Section shall be deemed compliance with the requirement(s) of 40 CFR 60.116b(a) and (b).

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

XIII. COMPLIANCE ASSURANCE MONITORING (CAM)

[40 CFR §64]

The CAM required under this Section applies to the quicklime truck and rail loadout facilities which are part of the back lime handling system.

A. CAM Plan for Back Lime Handling System Truck and Rail Loadout Facilities controlled by DC 414 Fabric Filter Baghouse.

- 1. Primary Indicators
 - a. Baghouse Differential Pressure.
 - b. Control device maintenance procedure as defined in Condition I.G of this Attachment
 - c. Visible Emissions.
- 2. Monitoring, Reporting, and Recordkeeping Requirements
 - a. Differential Pressure Requirements
 - i. The Permittee shall install, calibrate, and maintain a magnehelic pressure gauge, in accordance with manufacturer's recommendation, to monitor the differential pressure across DC 414 in the back lime handling system.

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

[Material permit conditions are indicated by underline and italics]

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ii. The Permittee shall calibrate the magnehelic pressure gauge on an annual basis in accordance with manufacturer specifications.

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

iii. The Permittee shall use the magnehelic pressure gauge required in Condition XIII.A.2.a.i to comply with the pressure monitoring requirements of this Section. Readings shall be taken and recorded at least once daily when the back lime handling system is in operation.

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

iv. The Permittee shall submit to the Director semi-annual reports with the compliance certifications required by Condition VII of Attachment "A" of occurrences when the measurement of the baghouse shows a differential pressure above 7" H₂O or below 1" H₂O.

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

b. Maintenance and Inspection Requirements

The Permittee shall, once every month, conduct a Control Device Monitoring and Maintenance Procedure, as defined in Condition I.G. of this Attachment, for Baghouse DC414.

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

c. Visible Emission Observation Procedure

The Permittee shall conduct a visible emission observation of the baghouse once every two weeks in accordance with Condition I.H.

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

- 3. Excursion Determination
 - a. An excursion is defined as:
 - i. Any differential pressure measurement across the baghouse which is greater than 7" H₂O or less than 1" H₂O.

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

ii. Any instantaneous opacity greater than 20%.

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

iii. Failure to perform a monthly maintenance and inspections procedure.

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

b. If an excursion is detected, then the Permittee shall initiate an investigation of the baghouse within 24 hours of the first discovery of the excursion incident and take corrective action as soon as practicable to adjust or repair the baghouse to minimize possible exceedances of the particulate matter standard established in Condition VII.B.1.b of this Attachment.

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

c. In the case of any excursion incident, the record shall include an identification of the date and time of the excursion, its cause, and an explanation of the corrective actions taken, if any.

[40 CFR §64.9]

B. CAM Operation Requirements

- 1. At all times, the Permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
- 2. Upon detecting an excursion, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.
- 3. Determination of whether the Permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
- 4. If the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which CAM did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, then the Permittee shall promptly notify the Director and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR §64.7]

C. Quality Improvement Plan (QIP) Requirements

- 1. In the event that an accumulation of exceedances or excursions exceeds 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period based on the results of a determination made under Condition XIII.B.3 above, the Permittee shall develop and implement a QIP. The Director may otherwise specify the threshold at a higher or lower percent or rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.
- 2. The QIP shall include the following elements:

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- a. The Permittee shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the Permittee shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
 - i. Improved preventive maintenance practices;
 - ii. Process operation changes;
 - iii. Appropriate improvements to control methods;
 - iv. Other steps appropriate to correct control performance; and
 - v. More frequent or improved monitoring (only in conjunction with one or more of steps (i) through (v).
- c. If a QIP is required, then the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the Director if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- d. Following implementation of a QIP, the Director may require the Permittee to make reasonable changes to the QIP if the QIP is found to have:
 - i. Failed to address the cause of the control device performance problems; or
 - ii. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- e. Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state or local law, or any other applicable requirements under the Act.

[40 CFR §64.8]

D. Reporting and Recordkeeping Requirements

- 1. Along with the compliance certifications required by Condition VII of Attachment "A", the Permittee shall submit to the Director monitoring reports required by this Section.
- 2. A monitoring report under this Section shall include the following information, as applicable:

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- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions, and the corrective actions taken.
- b. A description of the actions taken to implement a QIP during the semiannual reporting period as specified in Condition XIII.C above. Upon completion of a QIP, the Permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring.
- c. The Permittee shall maintain records of monitoring data, corrective actions taken, any written quality improvement plan required pursuant to Condition XIII.C above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this Section (such as data used to document the adequacy of monitoring, or records of monitoring, maintenance or corrective actions).
- d. Instead of paper records, the Permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR §64.9]

E. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with the following applicable requirements as of the issuance date of this permit: 40 CFR §64.

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

XIV. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Particulate Matter and Opacity

- 1. Open Areas, Roadways/Streets, Material Handling, Storage Piles
 - a. Emission Limitations/Standards
 - i. 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]

ii. The Permittee shall not cause, allow or permit visible emissions from any point source, in excess of 20 percent opacity.

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

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- iii. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
 - (a) 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]

(b) 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]

(c) 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]

- (d) 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]
- (e) 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]

(f) 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]

(g) 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]

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

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

iv. In conjunction with the requirements in Condition XIV.B.1.a.iii 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]

b. Air Pollution Control Requirements

i. 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. R-18-2-306.A.2 and -331.A.3.d]

[Material Permit Condition is indicated by underline and italics]

c. Monitoring and Recordkeeping Requirements

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

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

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

[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 R18-2-604(A), A.A.C R18-2-605(A), A.A.C R18-2-605(B), A.A.C R18-2-606, A.A.C R18-2-607(A), A.A.C R18-2-607(B), A.A.C R18-2-614, and A.A.C R18-2-702(B).

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

XV. 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

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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

i. 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]

ii. 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 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]

OTHER PERIODIC ACTIVITY REQUIREMENTS

Α. **Abrasive Blasting - Particulate Matter and Opacity**

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

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- i. wet blasting;
- ii. effective enclosures with necessary dust collecting equipment; or
- iii. 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.3]

2. Monitoring and Recordkeeping Requirement

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

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, 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.
- 3. Permit Shield

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

Compliance with this Part shall be deemed compliance with A.A.C. R18-2-726, and A.A.C. R18-2-702.B.3.

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:

i. 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]

ii. The Permittee or the designated contractor shall not either:

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

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(b) Thin or dilute any architectural coating with a photochemically reactive solvent.

[A.A.C.R18-2-727.B]

- iii. For the purposes of Conditions XVI.B.1.a.ii, 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 XVI.B.1.a.iii(a) through XVI.B.1.a.iii(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]

iv. 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 XVI.B.1.a.iii(a) through XVI.B.1.a.iii(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
 - i. Each time a spray painting project subject to Condition XVI.B.1.a.iis conducted, the Permittee shall log in ink, or in an electronic format, 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.
 - ii. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition XVI.B.1.b.i above.

c. Permit Shield

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

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

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.3]

b. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C.R18-2-727 and A.A.C. R18-2-702.B.3.

[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 Part 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 conditions of 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

Air Quality Control Permit No. 42782 For Nelson Lime Plant

Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule			
Primary Crushing Equipment									
Truck to Dump Hopper	1,400	Water Spray	NA	NA	NA	A.A.C. R18-2-720			
Dump Hopper to Apron Feeder 102	1,400	Water/Water Carryover	NA	NA	NA	A.A.C. R18-2-720			
Apron Feeder 102 to Cleanup Belt Conveyor 102B	1,400	Water/Water Carryover	NA	NA	Pre-1983	A.A.C. R18-2-720			
Cleanup Belt Conveyor 102B to Belt Conveyor 104	1,400	Water/Water Carryover	Hi-Line	42"	1973	A.A.C. R18-2-720			
Grizzley 102A	1,260	Water/Water Carryover	NA	NA	Pre-1983	A.A.C. R18-2-720			
Jaw Crusher 103	1260	Water/Water Carryover	KVS	48"x60"/554-P-73	1973	A.A.C. R18-2-720			
Belt Conveyor 104 to Belt Conveyor 202 via Bypass Chute	1,400	Enclosed	Hi-Line	42"	Pre-1983	A.A.C. R18-2-720			
Primary Screen 108	1,400	DC 234	Symons	GP-2820 / GP-8153	1999 (Like Kind Repl.)	A.A.C. R18-2-720			
Dust Collector 234 to Belt Conveyor 235	0.04	Sealed	Hi-Line	24"	1976	A.A.C. R18-2-720			
Belt Conveyor 235 to Belt Conveyor 223	630	DC 219-D	Hi-Line	24"	1976	A.A.C. R18-2-720			

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Surge Bin 107	60 ton capacity	DC 234	KVS	NA	1973	A.A.C. R18-2-720
Surge Bin 107 to Vibrating Feeder 201	1,050	Enclosed	Syntron	RF-120	1973	A.A.C. R18-2-720
Vibrating Feeder 201 to Belt Conveyor 202	1,050	Enclosed	Hi-Line	42"	Pre-1983	A.A.C. R18-2-720
Vibrating Screen 203	1,260	DC 206-D	Tyler	F-900, 6''x16''	1973	A.A.C. R18-2-720
Belt Conveyor 209 to Chat Silo 210	630	DC 213	KVS	NA	1973	A.A.C. R18-2-720
Dust Collector DC 213 to Chat Silo 210	0.01	Sealed	KVS	NA	1973	A.A.C. R18-2-720
Vibrating Screen 328 to Chat Silo 210	157	DC 213	KVS	NA	1973	A.A.C. R18-2-720
Chat Silo 210	500 ton capacity	DC 213	KVS	NA	1973	A.A.C. R18-2-720
Belt Conveyor 208	1,120	Water/Water Carryover	Hi-Line	24"	1973	A.A.C. R18-2-720
Belt Conveyor 208 to Kiln Feed Stockpile	1,120	Water/Water Carryover	NA	NA	NA	A.A.C. R18-2-607
Belt Conveyor 222	300	DC 219-D	Hi-Line	24"	1976	A.A.C. R18-2-720
Gyrating Crushers 206 (2)	650	DC 206-D	KVS	1752 / 557-P-73	1973	A.A.C. R18-2-720
Symons Cone Crusher 206	465	DC 206-D	Symons	5 ½" 5947	1981	A.A.C. R18-2-720
Belt Conveyor 204	1,400	DC 206-D	Hi-Line	30"	1973	A.A.C. R18-2-720
Belt Conveyor 204 to	1,050	Water/Water	Hi-Line	30"	1973	A.A.C. R18-2-720

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Belt Conveyor 207		Carryover				
Belt Conveyor 204 to Emergency Bypass Pile via Bypass Chute	1,050	Water/Water Carryover	NA	NA	NA	A.A.C. R18-2-607
Vibrating Screen 205	1,050	DC 206-D	Tyler	F-900, 6"x16"	1973	A.A.C. R18-2-720
Surge Bin 107 to Belt Conveyor 215	1,400	DC 234	Hi-Line	42"	1976	A.A.C. R18-2-720
Belt Conveyor 215 to Surge Stockpile	1,400	Water/Water Carryover	NA	NA	NA	A.A.C. R18-2-607
Surge Stockpile to Vibrating Feeders 216-1,2,3	1,400	Underground/ Water/Water Carryover	Syntron	MF-200-B	Pre-1983	A.A.C. R18-2-720
Vibrating Feeders 216-1,2,3 to Belt Conveyor 217	1,400	Underground/ Water/Water Carryover	Hi-Line	42"	1976	A.A.C. R18-2-720
Vibrating Screen 218	1,050	DC 219-D	Tyler	F-1406-X, 6"x16"	1976	A.A.C. R18-2-720
Belt Conveyor 222	300	DC 219-D	Hi-Line	24"	1976	A.A.C. R18-2-720
Belt Conveyor 223 to Belt Conveyor 209	630	DC 206-D	Hi-Line	24"	1973	A.A.C. R18-2-720
Belt Conveyor 220	910	Water Spray	Hi-Line	24"	1976	A.A.C. R18-2-720
Belt Conveyor 220 to Kiln Feed Stockpile	910	Water Spray	NA	NA	NA	A.A.C. R18-2-607
Gyratory Crusher 219	910	DC 219-D	KVS	1752/892-P-76	1976	A.A.C. R18-2-720

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Belt Conveyor 224	910	DC 234	Hi-Line	30"	1976	A.A.C. R18-2-720
Belt Conveyor 224 to Belt Conveyor 202	910	DC 234	Hi-Line	42"	1973	A.A.C. R18-2-720
Chat Silo 210 to Belt Conveyor 226	630	Enclosed	NA	NA	1999	40 CFR 60 Subpart OOO
Belt Conveyor 226	630	Enclosed/Water Spray	NA	NA	1999	40 CFR 60 Subpart OOO
Belt Conveyor 226 to Truck	630	Water Spray	NA	NA	NA	A.A.C. R18-2-607
Portable Grizzley	25	None	NA	NA	Pre-1983	A.A.C. R18-2-720
Dust Collector DC 234	4,853 dscfm	NA	Pneumafil	PCFH 284	NA	A.A.C. R18-2-720
Dust Collector DC 213	895 dscfm	NA	Mikro-Pulsaire	64-S-8-20B	1973	A.A.C. R18-2-720
Dust Collector DC 206-D	5108 dscfm	NA	Industrial Accessories	120TB-BVT-225:S6	NA	A.A.C. R18-2-720
Dust Collector DC 206-D to Truck	0.02	Enclosed	NA	NA	NA	A.A.C. R18-2-607
Dust Collector DC 219-D	1532 dscfm	NA	Industrial Accessories	120TB-BVT-100:S6	NA	A.A.C. R18-2-720
Dust Collector DC 219-D to Truck	0.02	Enclosed	NA	NA	NA	A.A.C. R18-2-607
Front-end Loader Discharge (5 Processes)	100	Water/Water Carryover/None	NA	NA	NA	A.A.C. R18-2-607
Truck Discharge to Storage Pile	100	None	NA	NA	NA	A.A.C. R18-2-607

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Truck Loadout (5 Processes)	100	Water/Water Carryover/None	NA	NA	NA	A.A.C. R18-2-607
Storage Piles (10 total)	NA	None	NA	NA	NA	A.A.C. R18-2-607
Kiln Feed System Equipment						
Kiln Feed Stockpile to Vibrating Feeders 301-1 to 301-6 (6 Feeders)	393	Underground	Syntron	RF-40 and RF-80	1976	A.A.C. R18-2-720
Vibrating Feeders 301-1 to 301-6 to Belt Conveyor 302	393	Underground	Hi-Line	30"	1973 (extended in 1976)	A.A.C. R18-2-720
Vibrating Screen 328	393	Enclosed	Tyler	R-1005-CS-G	1997	40 CFR 60 Subpart OOO
Belt Conveyor 302 to Belt Conveyor 329	393	Enclosed	Hi-Line	24"	1973 (extended in 1976)	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Belt Conveyor 329 to Belt Conveyor 303-A	236	Enclosed	Hi-Line	24"	1976	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Belt Conveyor 329 to Stone Bin 1-304	800 ton capacity	Enclosed	KVS	NA	1973	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Belt Conveyor 303-A to Stone Bin 2-304	700 ton capacity	Enclosed	KVS	NA	1976	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Stone Bin 1,2-304 to	197	Sealed	See Kiln 1, 2	See Kiln 1, 2	See Kiln 1, 2	A.A.C. R18-2-720

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Lime Kilns 1, 2						40 CFR §63 Subpart AAAAA
Solid Fuel Handling Equipment	t					
Coal/Coke Loading by Loader at Stockpile Location 1	220	None	NA	NA	NA	A.A.C. R18-2-607
Coal/Coke Unloading to Solid Fuel Hopper	220	None	KVS	NA	1973	40 CFR 60 Subpart Y
Coal/Coke Unloading by Front End Loader to Track Hopper	220	None	KVS	NA	1973	A.A.C. R18-2-716
Rail Car to Track Hopper	220	None	KVS	NA	1973	A.A.C. R18-2-716
Track Hopper to Feeders 504A,B	220	Underground	Syntron	RF-20	1973	A.A.C. R18-2-716
Crusher 505	220	DC 527	McLanahan	36" x 18"/1400-73	1973	A.A.C. R18-2-716
Solid Fuel Hopper to Weigh Belt 504C	220	Underground	NA	NA	2001	40 CFR 60 Subpart Y
Weigh Belt 504C to Bucket Elevator 521	220	Underground	Rex	1618-05M	1976	40 CFR 60 Subpart Y
Belt Conveyor 506 to Bucket Elevator 521	220	Underground	Rex	1618-05M	1976	40 CFR 60 Subpart Y
Bucket Elevator 521 to Belt Conveyor 514	220	DC 527	Hi-Line	24"	1973 (extended 1976)	A.A.C. R18-2-716
Belt Conveyor 514 to Solid Fuel Surge Piles	220	Chute	NA	NA	1973	A.A.C. R18-2-607

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Loader to Haul Truck at Solid Fuel Surge Pile	220	None	NA	NA	1973	A.A.C. R18-2-607
Haul Truck Dumping at Stockpile Location 2	220	None	NA	NA	1973	A.A.C. R18-2-607
Loader to Haul Truck at Stockpile Location 2	220	None	NA	NA	1973	A.A.C. R18-2-607
Haul Truck to Stockpile Location 1	220	None	NA	NA	1973	A.A.C. R18-2-607
Roll Crusher 522	220	DC-527	KVS	36"x36" / 891-P-76	1976	40 CFR 60 Subpart Y
Roll Crusher 522 to Belt Conveyor 516	220	DC-527	KVS	24"	1976	40 CFR 60 Subpart Y
Belt Conveyor 516 to Fuel Bin 2-517	650 ton capacity	Enclosed	KVS	NA	1976	40 CFR 60 Subpart Y
Roll Crusher 522 to Fuel Bin 1-508	500 ton capacity	DC-527	KVS	NA	1973	A.A.C. R18-2-716
Dust Collector DC 527 to Fuel Bin 1-508	0.005	Sealed	KVS	NA	1973	A.A.C. R18-2-716
Loading by Loader to Trucks for Shipment Offsite	25	None	NA	NA	1973	A.A.C. R18-2-607
Fuel Bin 1-508 to Weigh Feeder 1-601	14	Enclosed	Ramsey	10-301	1976	40 CFR 60 Subpart Y
Weigh Feeder 1-601 to Screw Conveyor 1-613	14	DC-527	Martin Conveyor	14"	2005	40 CFR 60 Subpart Y

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Ball Mill 1-602	28	Sealed	KVS	9'x12'6"	1973	A.A.C. R18-2-716
Ball Mill 1-602 to Classifier 1-604	28	Sealed	Vari-Mesh	No. 6	1973	A.A.C. R18-2-716
Classifier 1-604 to Kiln 1	15	Sealed	See Kiln 1	See Kiln 1	1973	A.A.C. R18-2-716
Fuel Bin 2-517 to Weigh Feeder 1-601	21	Enclosed	Ramsey	10-301	1976	40 CFR 60 Subpart Y
Ball Mill 2-602	42	Sealed	KVS	10'x10'6''	1976	40 CFR 60 Subpart Y
Ball Mill 2-602 to Classifier 2-604	42	Sealed	Vari-Mesh	NA	1976	40 CFR 60 Subpart Y
Classifier 2-604 to Kiln 2	21	Sealed	See Kiln 2	See Kiln 2	1976	40 CFR 60 Subpart Y
Dust Collector 527	4,795 dscfm	NA	Mikro-Pulsaire	100-S-10-20	1976	A.A.C. R18-2-716
Kiln 1 and Kiln 2 System Equip	oment					
Kiln 1	39.38	Baghouse BGH1, Multicyclone 1-319	KVS	15'dia x 155'	1973	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Kiln 1 Multicyclone 1-319	200,000 acfm	Sealed	Research Cottrell	CY-119	1973	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Kiln 1 Baghouse BGH1	82,612 dscfm	NA	BoldEco	FBCL-14-2-18-16-10	2006	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Kiln 2	58.96	Baghouse BGH2, Multicyclone 2-319	KVS	17'diax178.5'	1976	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Kiln 2 Multicyclone 2-319	200,000 acfm	Sealed	Cyclo-Trell	Type C-24 / 41-31- 1738	1976	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Kiln 2 Baghouse BGH2	109431 dscfm	NA	Amerex Rex- Pulse	10RP-14-324D6	1998	A.A.C. R18-2-720 40 CFR §63 Subpart AAAAA
Lime Kiln 1 to Contact Cooler 1-310	39.38	Sealed	Ferenco	Knimes	1995	A.A.C. R18-2-730 40 CFR §63 Subpart AAAAA
Lime Kiln 2 to Contact Cooler 2-310	58.96	Sealed	KVS	20° dia.	1976	A.A.C. R18-2-730 40 CFR §63 Subpart AAAAA
Kiln 1 and Kiln 2 Dust Handling	g					
Kiln 1 Baghouse to Screw Conveyor 1-316E	12	Sealed	Bold-Eco	10"	2006	A.A.C. R18-2-730
Kiln 1 Baghouse to Screw Conveyor 1-316D	12	Sealed	Bold-Eco	10"	2006	A.A.C. R18-2-730
Screw Conveyors 1-316E and 1-316D to Screw Conveyor 1-316C	24	Sealed	Bold-Eco	12"	2006	A.A.C. R18-2-730
Screw Conveyor 1-316C to Screw Conveyor 1-316B	24	Sealed	Bold-Eco	12"	2006	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Multicyclone 1-319 to Screw Conveyor 1-316A	24	Sealed	Ft Worth Steel	12"	1973	A.A.C. R18-2-730
Screw Conveyors 1-316A and Screw Conveyor 1-316B to Screw Conveyor 1-318/1-316	24	Sealed	Ft Worth Steel	12"	1973	A.A.C. R18-2-730
Screw Conveyor 1-316B to Screw Conveyor 1-1318/1-316 to Bin Elevator 1-317	24	Sealed	Rexnord	1110-01	1973	A.A.C. R18-2-730
Bin Elevator 1-317 to Dust Bin 1-318	50 ton capacity	DC 1-321	KVS	NA	1973	A.A.C. R18-2-730
DC 1-321 to Dust Bin 1-318	0.002	Sealed	KVS	NA	1973	A.A.C. R18-2-730
Dust Bin 1-318 to Truck or Super Sack	24	DC 1-321	NA	NA	NA	A.A.C. R18-2-730
Dust Bin 1-318 to Screw Conveyor 2-316	24	Sealed	Ft Worth Steel	9"	1976	A.A.C. R18-2-730
Dust Collector DC 1-321	1,324 dscfm	NA	Mikro-Pulsaire	36S-8-30	1973	A.A.C. R18-2-730
Kiln 2 Baghouse to Screw Conveyor 2-316G	36	Sealed	NA	NA	1998	A.A.C. R18-2-730
Kiln 2 Baghouse to Screw Conveyor 2-316F	36	Sealed	NA	NA	1998	A.A.C. R18-2-730
Screw Conveyors 2-316G and 2-316F to Screw Conveyor 2-316E	36	Sealed	NA	NA	1998	A.A.C. R18-2-730
Screw Conveyor 2-316E to Screw Conveyor 2-316D	36	Sealed	NA	NA	1998	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Screw Conveyor 2-316D to Screw Conveyor 2-316C	36	Sealed	Ft. Worth Steel	16"	1976	A.A.C. R18-2-730
Multiclone 2-319 to Screw Conveyor 2-316A	36	Sealed	Ft. Worth Steel	9"	1976	A.A.C. R18-2-730
Screw Conveyor 2-316 to Screw Conveyor 2-316B	24	Sealed	Ft. Worth Steel	12"	1976	A.A.C. R18-2-730
Screw Conveyor 2-316A to Screw Conveyor 2-316B	36	Sealed	Ft. Worth Steel	12"	1976	A.A.C. R18-2-730
Screw Conveyor 2-316B to Screw Conveyor 2-316C	36	Sealed	Ft. Worth Steel	16"	1976	A.A.C. R18-2-730
Screw Conveyor 2-316C to Bin Elevator 2-317	36	Sealed	Rexnord	1112-01	1976	A.A.C. R18-2-730
Bin Elevator 2-317 to Dust Bin 2-318	150 ton capacity	Sealed	KVS	NA	1976	A.A.C. R18-2-730
Dust Collector 2-321 to Dust Bin 2-318	0.001	DC 321	KVS	150 ton #2-318	1976	A.A.C. R18-2-730
Dust Collector DC 2-321	2,331 dscfm	NA	Mikro-Pulsaire	64S-8-20B	1976	A.A.C. R18-2-730
Dust Bin 2-318 to Truck or Super Sack	36	DC 321	NA	NA	NA	A.A.C. R18-2-730
Dust Bin 2-318 to Screw Conveyor 461	36	Sealed	Mesco Conveying Corp	UT 40-40-08	1994	A.A.C. R18-2-730
Front Lime Handling system						
Contact Cooler 1-310 to	39.38	DC 762-1	NA	NA	1995	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Vibrating Feeders 340A,B,C,D						
Vibrating Feeders 340A,B,C,D to Apron Conveyor 420	39.38	DC 762-1	Rexnord	24"	1976	A.A.C. R18-2-730
Contact Cooler 2-310 to Vibrating Feeder 2-311	58.96	DC 762-1	KVS	60"	1976	A.A.C. R18-2-730
Vibrating Feeder 2-311 to Apron Conveyor 420	58.96	DC 762-1	Rexnord	24"	1976	A.A.C. R18-2-730
Screw Conveyor 411 to Apron Conveyor 420	20	DC 762-1	Rexnord	24"	1976	A.A.C. R18-2-730
Dust Collector DC 762-1 to Apron Conveyor 420	0.001	Sealed	Rexnord	24"	1976	A.A.C. R18-2-730
Dust Collector DC 762-1	3,464 dscfm	NA	Pneumafil	PKE-24	NA	A.A.C. R18-2-730
Apron Conveyor 420 to Apron Conveyor 421	98	DC 419-5	Rexnord	42"	1976	A.A.C. R18-2-730
Dust Collector DC 419-5 to Apron Conveyor 421	0.0004	Sealed	Rexnord	42"	1976	A.A.C. R18-2-730
Dust Collector DC 419-5	925 dscfm	Sealed	Mikro-Pulsaire	16S-8-30	NA	A.A.C. R18-2-730
Apron Conveyor 421 to Bucket Elevator 423	98	DC 430	Rexnord	1100 Series	1976	A.A.C. R18-2-730
Bucket Elevator 423 to Bucket Elevator 424-1	98	DC 430	Rexnord	1100 Series	1976	A.A.C. R18-2-730
Bucket Elevator 423 to Bucket Elevator 424-2	98	DC 430	Rexnord	1100 Series	1976	A.A.C. R18-2-730
Screen 432	197	DC 430	Tyler	5"x14" 3S R-1406-	1976	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
				X/50-2685		
Screen 432 to Undersize Lime Hopper	10	DC 430	NA	NA	1999	A.A.C. R18-2-730
Dust Collector DC 430 to Screw Conveyor 430-A	0.006	Sealed	NA	NA	NA	A.A.C. R18-2-730
Screw Conveyor 430-A to Screw Conveyor 428	36	Sealed	Purvis Bearing	20"	1999	A.A.C. R18-2-730
Dust Collector DC 430	6,568 dscfm	NA	Mikro-Pulsaire	196S-10-TRH	1976	A.A.C. R18-2-730
Undersize Lime Hopper to Screw Conveyor 428	10	Sealed	Purvis Bearing	20"	1999	A.A.C. R18-2-730
Screw Conveyor 428 to Bucket Elevator 424-C	10	Sealed	Rexnord	1100 Series	1999	A.A.C. R18-2-730
Bucket Elevator 424-C to Screw Conveyor 427	10	Sealed	Ft. Worth Steel	24"	1976	A.A.C. R18-2-730
Screw Conveyor 427 to Product Silo 3A (428-3)	3,300 ton capacity	Sealed	KVS	45' dia.	1976	A.A.C. R18-2-730
Screen 432 to Hammermill 422	98	DC 430	NA	NA	1999	A.A.C. R18-2-730
Hammermill 422 to Screw Conveyor 413	98	DC 430	Ft. Worth Steel	16"	1973	A.A.C. R18-2-730
Screw Conveyor 413 to Bucket Elevator 423	98	DC 430	Rexnord	1100 Series	NA	A.A.C. R18-2-730
Bucket Elevators 424-1, 2 to Screw Conveyor 425	98	Sealed	Ft. Worth Steel	24"	1976	A.A.C. R18-2-730
Bucket Elevators 424-1, 2 to	98	Sealed	Ft. Worth Steel	24"	1976	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second) Screw Conveyors 426	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Sciew Conveyors 426						
Bucket Elevators 424-1, 2 to Truck	98	None	NA	NA	NA	A.A.C. R18-2-607
Screw Conveyor 425 to Product Silo 1A (428-1)	3,300 ton capacity	Sealed	KVS	45' dia	1976	A.A.C. R18-2-730
Screw Conveyor 426 to Product Silo 2A(428-2)	3,300 ton capacity	Sealed	KVS	45' dia	1976	A.A.C. R18-2-730
Bucket Elevator 424-1, 2 to Product Silo 2A (428-2)	3,300 ton capacity	Sealed	KVS	45' dia	1976	A.A.C. R18-2-730
Dust Collector DC 437B to Product Silo 2A (428-2)	0.001	Sealed	KVS	45' dia	1976	A.A.C. R18-2-730
Dust Collector DC 437B	925 dscfm	NA	Mikro-Pulsaire	25S-8-30	1976	A.A.C. R18-2-730
Product Silo 1A (428-1) to Vibrating Feeder 443-1	167	DC 437D	FMC	Syntron RF-80 30" x 54"	1976	A.A.C. R18-2-730
Product Silo 2A(428-2) to Vibrating Feeder 443-2	167	DC 437E	FMC	Syntron MF-200-B 48" x 84"	1976	A.A.C. R18-2-730
Product Silo 3A (428-3) to Vibrating Feeder 443-3	167	DC 437F	FMC	Syntron MF-200-B 48" x 84"	1976	A.A.C. R18-2-730
Vibrating Feeder 443-1 to Belt Conveyor 435	167	DC 437D	Hi-Line	42"	1976	A.A.C. R18-2-730
Vibrating Feeder 443-2 to Belt Conveyor 435	167	DC 437E	Hi-Line	42"	1976	A.A.C. R18-2-730
Vibrating Feeder 443-3 to Belt Conveyor 435	167	DC 437F	Hi-Line	42"	1976	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Belt Conveyor 435 to Rail/Truck/Super-Sack	167	DC 437C	NA	NA	NA	A.A.C. R18-2-730
Product Silo 1A (428-1) to Vibrating Feeder 433-1 with Screen Cloth	83	DC 437D	FMC	Syntron RF-80 30" x 54"	1976	A.A.C. R18-2-730
Product Silo 2A (428-2) to Vibrating Feeder 433-2	83	DC 437E	FMC	Syntron RF-80 30" x 54"	1976	A.A.C. R18-2-730
Product Silo 428-3 to Vibrating Feeder 433-3	83	DC 437F	FMC	Syntron RF-80 30" x 54"	1976	A.A.C. R18-2-730
Vibrating Feeder 433-1 to Belt Conveyor 434	83	DC 437D	Hi-Line	30"	1976	A.A.C. R18-2-730
Vibrating Feeder 433-2 to Belt Conveyor 434	83	DC 437E	Hi-Line	30"	1976	A.A.C. R18-2-730
Vibrating Feeder 433-3 to Belt Conveyor 434	83	DC 437F	Hi-Line	30"	1976	A.A.C. R18-2-730
Vibrating Feeders 433-1, 443-1 to Screw Conveyor 441	10	Sealed	NA	NA	NA	A.A.C. R18-2-730
Screw Conveyor 441 to Screw Conveyor 470	10	Sealed	Purvis Bearing	9"	1999	A.A.C. R18-2-730
Screw Conveyor 470 to Screw Conveyor 471	10	Sealed	Purvis Bearing	9"	1999	A.A.C. R18-2-730
Screw Conveyor 471 to Bucket Elevator 423	10	Sealed	Rexnord	1100 Series	NA	A.A.C. R18-2-730
Belt Conveyor 434 to Truck/Super-Sack	28	DC 437F	NA	NA	NA	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Gypsum Vibrating Hopper to Screw Conveyor 444	25	Sealed	NA	NA	NA	A.A.C. R18-2-730
Screw Conveyor 444 to Belt Conveyor 434	25	Sealed	Hi-Line	30"	1976	A.A.C. R18-2-730
Screw Conveyor 461 to Dust Recovery Bin BN 464	16 ton capacity	DC 452	Silotek	NA	1994	A.A.C. R18-2-730
Dust Recovery Bin BN 464 to Screw Conveyor 465	36	Sealed	NA	9"	1994	A.A.C. R18-2-730
Dust Recovery Bin BN 464 to Screw Conveyor 466	36	Sealed	NA	9"	1994	A.A.C. R18-2-730
Screw Conveyor 465 to Belt Conveyor 434	36	Sealed	Hi-Line	30"	1976	A.A.C. R18-2-730
Screw Conveyor 466 to Belt Conveyor 435	36	Sealed	Hi-Line	42"	1976	A.A.C. R18-2-730
Dust Collector DC 452 to Dust Recovery Bin BN 464	0.001	Sealed	Silotek	NA	1994	A.A.C. R18-2-730
Dust Collector DC 452	1,122 dscfm	NA	Pneumafil	PCFH 8BV	1994	A.A.C. R18-2-730
Dust Collector DC 437A to Belt Conveyor 434	0.008	Sealed	Hi-Line	30"	1976	A.A.C. R18-2-730
Dust Collector DC 437A	809 dscfm	NA	Mikro-Pulsaire	25S-8-30	1976	A.A.C. R18-2-730
Dust Collector DC 437C to Belt Conveyor 435	0.050	Sealed	Hi-Line	42"	1976	A.A.C. R18-2-730
Dust Collector DC 437C	809 dscfm	NA	Mikro-Pulsaire	36S-10-30	1976	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Dust Collector DC 437D to Belt Conveyor 435	0.002	Sealed	Hi-Line	42"	1976	A.A.C. R18-2-730
Dust Collector DC 437D	1,858 dscfm	NA	Mikro-Pulsaire	49S-8-20	NA	A.A.C. R18-2-730
Dust Collector DC 437E to Belt Conveyor 435	0.002	Sealed	Hi-Line	42"	1976	A.A.C. R18-2-730
Dust Collector DC 437E	1,858 dscfm	NA	Mikro-Pulsaire	49S-8-20	NA	A.A.C. R18-2-730
Dust Collector DC 437F to Belt Conveyor 435	0.002	Sealed	Hi-Line	42"	1976	A.A.C. R18-2-730
Dust Collector DC 437F	1,858 dscfm	NA	Mikro-Pulsaire	498-8-20	NA	A.A.C. R18-2-730
Back Lime Handling System						
Vibrating Feeders 340A,B,C,D to Belt Conveyor 401	39.38	DC 762-1	Hi-Line	24"	1973 (extended 1976)	A.A.C. R18-2-730
Vibrating Feeder 2-311 to Belt Conveyor 401	58.96	DC 762-1	Hi-Line	24"	1973 (extended 1976)	A.A.C. R18-2-730
Belt Conveyor 401 to Bucket Elevator 403	98	DC 414	Rexnord	1612-02	1973	A.A.C. R18-2-730
Rail Car to Off-Load Hopper	100	Sealed	NA	NA	NA	A.A.C. R18-2-730
Off-Load Hopper to Screw Conveyor 412	100	Sealed	Ft. Worth Steel	16"	1973	A.A.C. R18-2-730
Screw Conveyor 412 to Bucket Elevator 403	100	DC 414	Rexnord	1612-02	1973	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Hammer Mill 402-2	98	Sealed	Williams	C-32 Slugger/14399	1992	A.A.C. R18-2-730
Belt Conveyor 401 to Bucket Elevators 406E, W	98	DC 414	Rexnord	1612-01	1973	A.A.C. R18-2-730
Belt Conveyor 402 to Bucket Elevator 403	20	DC 414	Rexnord	1612-02	1973	A.A.C. R18-2-730
Belt Conveyor 402 to Screw Conveyor 411	20	DC 414	NA	U-shape	2006 (replaced)	A.A.C. R18-2-730
Bucket Elevator 403 to Screw Conveyor 443	250	DC 414	Conveyor Inc.	24"	1991	A.A.C. R18-2-730
Bucket Elevator 403 to Truck or Ground	250	Chute	NA	NA	NA	A.A.C. R18-2-730
Roll Crusher 444	250	DC 414	McLanahan	24" x36"/903060	1991	A.A.C. R18-2-730
Roll Crusher 444 to Screw Conveyor 445	250	DC 414	Conveyors Inc.	24"	1991	A.A.C. R18-2-730
Screw Conveyor 445 to Bucket Elevator 446	250	DC 414	NA	NA	1991	A.A.C. R18-2-730
Screen 404	250	DC 414	Tyler	F-600, 4' x 12'/20423	1973	A.A.C. R18-2-730
Hammermill 405	98	DC 414	Williams	340R/15562	1998	A.A.C. R18-2-730
Hammermill 405 to Screw Conveyor 447	98	DC 414	Conveyors, Inc.	16"	1991	A.A.C. R18-2-730
Screw Conveyor 447 to Bucket Elevator 446	98	DC 414	NA	NA	1991	A.A.C. R18-2-730
Bucket Elevators 406E, W to	98	DC 414	NA	NA	1994	A.A.C. R18-2-730

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Screw Conveyor 408						
Bucket Elevators 406E, W to Screw Conveyors 408, 408A, B, C	98	DC 414	Thomas Conveyors	20"	1994	A.A.C. R18-2-730
Screw Conveyors 408, 408A, B, C to Silos 1, 3, 4, 5	950 ton capacity	Sealed	KVS	NA	1973	A.A.C. R18-2-730
Bucket Elevators 406E, W to Silo 2	950 ton capacity	Sealed	KVS	NA	1973	A.A.C. R18-2-730
Silo 3 to Belt Conveyor 402	98	Enclosed	NA	NA	NA	A.A.C. R18-2-730
Silos 1, 2, 3, 4, 5 to Truck, Rail, Super Sack	107	DC 414	NA	NA	NA	A.A.C. R18-2-730
Dust Collector DC 414	4,940 dscfm	NA	Mikro-Pulsaire	1F-2-48	1973	A.A.C. R18-2-730
Dust Collector DC 414 to Screw Conveyor 414-2	0.23	Sealed	NA	NA	NA	A.A.C. R18-2-730
Screw Conveyor 414-2 to Silo 2	0.23	Sealed	KVS	950 Ton Bins/#409-2	1973	A.A.C. R18-2-730
Filling Supersacks	2	None	NA	NA	NA	A.A.C. R18-2-730
Hydrator System						
Silo 2 to Screw Conveyor 701	15	Sealed	NA	NA	1988	A.A.C. R18-2-720
Silo 5 to Screw Conveyor 702	15	Sealed	NA	NA	1988	A.A.C. R18-2-720
Screw Conveyors 701, 702 to Quicklime Feed Surge Bin 703	15	Sealed	3 Tons	NA	1988	A.A.C. R18-2-720
Quicklime Feed Surge Bin 703 to Belt Conveyor 704	15	Sealed	Ramsey	Belt Scale System/ Scale 10-101R-	1988	A.A.C. R18-2-720

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
				1/Integrator 2001		
Quicklime Belt Conveyor 704 to Screw Conveyor 707	15	Sealed	NA	NA	1988	A.A.C. R18-2-720
Screw Conveyor 707 to Pug Mill 708	15	Sealed	Ehrsam	Twin Paddle	1988	A.A.C. R18-2-720
Seasoning Chamber 710	15	Ducon Slaker Scrubber DF 711	18' x 8' Diameters	NA	1988	A.A.C. R18-2-720
Ducon Slaker Scrubber DF 711	3,909 dscfm	NA	Ducon Wet Scrubber	UW-4(48)	1988	A.A.C. R18-2-720
Seasoning Chamber 710 to Screw Conveyor 712	16	Dust Collector DC 721	NA	NA	1999	A.A.C. R18-2-720
Screw Conveyor 712 to Bucket Elevator 719	31	Dust Collector DC 721	NA	NA	1999	A.A.C. R18-2-720
Bucket Elevator 719 to Air Separator 715	31	Dust Collector DC 721	Sturtevant	Whirlwind 12"/3086	1999	A.A.C. R18-2-720
Air Separator 715	31	Dust Collector DC 721	Sturtevant	Whirlwind 12"/3086	1999	A.A.C. R18-2-720
Air Separator 715 to Screw Conveyor 718	16	Dust Collector DC 721	NA	NA	1999	A.A.C. R18-2-720
Dust Collector DC 721 to Screw Conveyor 718	0.0004	Sealed	NA	NA	1999	A.A.C. R18-2-720
Dust Collector DC 721	6,192 dscfm	NA	American Air Filter	Millenium	1999	A.A.C. R18-2-720
Screw Conveyor 718 to Bucket Elevator 713	31	Ducon Slaker Scrubber DF 711	NA	NA	1988	A.A.C. R18-2-720

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Emission Unit (For multiple Equipment Units, the description applies to the second)	Rated Capacity (tons/hour or indicated Units)	Control Device/Method	Make	Model/Serial No.	Date of Manufacture	Applicable Rule
Hammermill 717	16	Dust Collector DC 721	Williams Crusher Co.	Meteor Mill, Size 18	1999	A.A.C. R18-2-720
Bucket Elevator 713 to Hydrated Lime Silo 6	31	Ducon Slaker Scrubber DF 711	KVS	950 Ton Bin/#409-6	1973	A.A.C. R18-2-720
Dust Collector DC 750A to Screw Conveyor DC 750	0.01	Sealed	NA	NA	NA	A.A.C. R18-2-720
Dust Collector 750A	2,000 dscfm	NA	Industrial Accessories	108TB-BHI-36-S6	NA	A.A.C. R18-2-720
Hydrated Lime Silo 6 to Screw Conveyor 750	31	Sealed	NA	NA	NA	A.A.C. R18-2-720
Screw Conveyor 750 to Truck/Rail/Super-Sack	31	Dust Collector 750A	NA	NA	NA	A.A.C. R18-2-720
Diesel Generators						
North Electric Generators	1150 ekW	None	Diversified Technical Services	1150 EkW/3516 DITA	1990	A.A.C. R18-2-719 40 CFR 63 Subpart ZZZZ
South Electric Generator	1150 ekW	None	Diversified Technical Services	1150 EkW/3516 DITA	1990	A.A.C. R18-2-719 40 CFR 63 Subpart ZZZZ
Canyon Well Electric Generator	<125 kW	Certified Generator	Caterpillar	D60-6 / GLD00317	2009	40 CFR 60 Subpart IIII 40 CFR 63 Subpart ZZZZ

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