



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CLASS II SYNTHETIC MINOR PERMIT

COMPANY: *CEMEX Construction Materials South, LLC*
FACILITY: *Country Arizona Portable #1*
PERMIT #: *49442*
DATE ISSUED: *Draft*
EXPIRY DATE:

SUMMARY

This Air Quality Control Permit is issued to CEMEX Construction Materials South, LLC, the Permittee, for operation of a concrete batch plant (CBP) with or without a collocated crushing and screening (C&S) plant. Collocation within Maricopa County is prohibited.

The concrete batch plant has uncontrolled particulate matter (PM) and particulate matter less than 10 microns in diameter (PM₁₀) emissions above the significance levels of 25 tons per year and 15 tons per year respectively, as identified in Arizona Administrative Code (A.A.C.) R18-2-101(106)(a). The facility has the potential to emit (PTE), with controls, 90 tons per year of NO_x, 79.38 tons per year of PM₁₀ and 55.84 tons per year of PM₁₀. Therefore, the above facility is a synthetic minor source and no hourly or production limitations are imposed on this source while operating in all counties within Arizona, except in Maricopa County. When operating in Maricopa County, the concrete batch plant is limited to 9 hours per day and 3,088 hours per year in order to keep the source below the Maricopa County Rule 241 Best Available Control Technology (BACT) threshold.

This permit is issued in accordance with Arizona Revised Statutes (ARS) §49-426. It contains requirements from the Arizona Administrative Code, Title 18, Chapter 2, and the Pima, Pinal, and Maricopa County regulations.

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ATTACHMENT "A": GENERAL PROVISIONS

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I. PERMIT EXPIRATION AND RENEWAL

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

- A. This permit is valid for a period of five years from the date of issuance.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months, prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS

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

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the 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, -321.A.1.c-d, and -321.A.2]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
 - 1. 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.
 - 2. 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 affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings shall not result in a resetting of the five-year permit term.

IV. POSTING OF PERMIT

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

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

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

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

V. FEE PAYMENT

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

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

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

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

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

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

VII. COMPLIANCE CERTIFICATION

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

A. The Permittee shall submit a compliance certification to the Director semiannually which describes the compliance status of the source with respect to each permit condition. The certifications shall be submitted no later than May 15th and November 15th. The May 15th compliance certification shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The November 15th compliance certification shall report the compliance status of the source during the period between April 1st and September 30th of the current 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. The Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period;
3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means

designated in Condition VII.A.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;

4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
5. Other facts the Director may require determining the compliance status of the source.

B. A progress report on all outstanding compliance schedules shall be submitted every six months beginning with six months after permit issuance.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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

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

IX. INSPECTION AND ENTRY

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

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

- A.** Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B.** Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C.** Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D.** Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E.** Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

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

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

XI. ACCIDENTAL RELEASE PROGRAM

[40 CFR Part 68]

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

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

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

1. Excess emissions shall be reported as follows:
 - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - 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 below.
 - 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;
 - 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 Permittee first learned of the occurrence of a deviation from a permit requirement.

C. Emergency Provision

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

1. An “emergency” means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was being properly operated at the time;
 - c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Compliance Schedule

[ARS § 49-426.I.5]

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

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

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

1. Applicability

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

- a. Promulgated pursuant to Sections 111 or 112 of the Act;
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;
- d. Contained in A.A.C. R18-2-715.F; or
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.

2. Affirmative Defense for Malfunctions

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

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;

- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the 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

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

5. Demonstration of Reasonable and Practicable Measures

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

XIII. RECORD KEEPING REQUIREMENTS

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

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

1. The date, place as defined in the permit, and time of sampling or measurements;
2. The date(s) analyses were performed;
3. The name of the company or entity that performed the analyses;
4. A description of the analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions as existing at the time of sampling or measurement.

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

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

XIV. REPORTING REQUIREMENTS

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

The Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII of Attachment "A".
- B. Excess emission; permit deviation, and emergency reports in accordance with Section XII of Attachment "A".
- C. Other reports required by any condition of Attachment "B".

XV. DUTY TO PROVIDE INFORMATION

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

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION

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

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

- A. Facility Changes that Require a Permit Revision - Class II (A.A.C. R18-2-317.01);
- B. Administrative Permit Amendment (A.A.C. R18-2-318);
- C. Minor Permit Revision (A.A.C. R18-2-319); and
- D. Significant Permit Revision (A.A.C. R18-2-320).

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

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

[A.A.C. R18-2-306.A.4 and -317.02]

- A. Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under A.A.C. R18-2-317.01, or a change subject to logging or notice requirements in Conditions XVII.B and XVII.C below, a change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.
- B. Except as otherwise provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source keeps on site records of the changes according to Appendix 3 of the Arizona Administrative Code:

1. Implementing an alternative operating scenario, including raw materials changes;
2. Changing process equipment, operating procedures, or making any other physical change if the permit requires the change to be logged;
3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.57.a through A.A.C. R18-2-101.57.i but not listed in the permit;
4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and
5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.

C. Except as provided in the conditions applicable to an emissions cap created under A.A.C. R18-2-306.02, the following changes may be made if the source provides written notice to the Department in advance of the change as provided below:

1. Replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: 7 days. The Director may require verification of efficiency of the new equipment by performance tests;
2. A physical change or change in the method of operation that increases actual emissions more than 10% of the major source threshold for any conventional pollutant but does not require a permit revision: 7 days;
3. Replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests;
4. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement;
5. A change that amounts to reconstruction of the source or an affected facility: 7 days. For the purposes of this subsection, reconstruction of a source or an affected facility shall be presumed if the fixed capital cost of the new components exceeds 50% of the fixed capital cost of a comparable entirely new source or affected facility and the changes to the components have occurred over the 12 consecutive months beginning with commencement of construction; and
6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that source category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.

D. For each change under Condition XVII.C above, the written notice shall be by certified mail

or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice 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.** A source may implement any change in Condition XVII.C above without the required notice by applying for a minor permit revision under A.A.C. R18-2-319 and complying with subsection A.A.C. R18-2-319.D.2 and A.A.C. R18-2-319.G.
- F.** 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 operating scenario under Condition XVII.B.1.
- 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, constitutes a change under subsection A.A.C. R18-2-317.01.A.
- H.** If a source change is described under both Conditions XVII.B and XVII.C above, the source shall comply with Condition XVII.C above. If a source change is described under both Condition XVII.C above and A.A.C. R18-2-317.01.B, the source shall comply with A.A.C. R18-2-317.01.B.
- I.** A copy of all logs required under Condition XVII.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.
- J.** Logging Requirements

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

1. Each log entry required by a change under Condition XVII.B shall include at least the following information:
 - a. A description of the change, including:
 - i. A description of any process change;
 - ii. A description of any equipment change, including both old and new equipment descriptions, model numbers, and serial numbers, or any other unique equipment ID number; and
 - iii. A description of any process material change.
 - b. The date and time that the change occurred.

- c. The provision of A.A.C. R18-2-317.02.B that authorizes the change to be made with logging.
 - d. The date the entry was made and the first and last name of the person making the entry.
2. Logs shall be kept for 5 years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially number pages, or in any other form, including electronic format, approved by the Director.

XVIII. TESTING REQUIREMENTS

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

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

B. Operational Conditions During Testing

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

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

D. Test Plan

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

1. Test duration;
2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

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

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s);
3. Safe access to sampling platform(s); and

4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

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

G. Report of Final Test Results

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

XIX. PROPERTY RIGHTS

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

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

XX. SEVERABILITY CLAUSE

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

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

XXI. PERMIT SHIELD

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

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

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 49442 For CEMEX Construction Materials South, LLC

I. FACILITY WIDE LIMITATIONS

A. Operating Limitations

1. The Permittee shall operate all the facility equipment in accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available, the Permittee shall prepare an Operation and Maintenance Plan, which provides adequate information to properly operate and maintain the equipment in good working order. In the absence of vendor-supplied operations and maintenance instructions, the Permittee shall operate the equipment in accordance with the Operation and Maintenance Plan (OMP). The Operation and Maintenance Plan shall be made available to ADEQ on request.
[A.A.C. R18-2-306.A.2]
2. The Permittee shall have on-site or on-call a person that is certified in EPA Reference Method 9 for the observation and evaluation of visible emissions.
[A.A.C. R18-2-306.A.2]
3. *While operating in Maricopa County, the Permittee shall not operate the concrete batch plant or generators for more than 9 hours per day and 3,088 hours in any rolling 12-month period.*
[A.A.C. R18-2-306.01 and -331.A.3.a]
[Material Permit Condition is indicated by underline and italics]
4. *The Permittee shall not collocate the concrete batch plant with a crushing and screening plant when operating in Maricopa County.*
[A.A.C. R18-2-306.01 and -331.A.3.a]
[Material Permit Condition is indicated by underline and italics]
5. *The Permittee shall not collocate the concrete batch plant with any hot mix asphalt plant.*
[A.A.C. R18-2-306.01 and -331.A.3.a]
[Material Permit Condition is indicated by underline and italics]
6. When collocating a crushing and screening plant with the concrete batch plant outside of Maricopa County, the Permittee shall comply with all the requirements presented in the Crushing and Screening General Permit for the crushing and screening equipment being operated. The crushing and screening plant shall be covered by a valid crushing and screening general permit.
[A.A.C. R18-2-306.A.2]

B. Record Keeping Requirements

1. If operating within Maricopa County, the Permittee shall log, on a daily basis, the hours of operation of the concrete batch plant and generators. These records shall

include the date, starting time (in hours and minutes), and stopping time (in hours and minutes).

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

2. If operating within Maricopa County, the Permittee shall maintain a rolling 12-month total of the operating hours inside Maricopa County for the concrete batch plant.

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

3. The Permittee shall maintain on-site, records of the manufacturer's specifications for all equipment utilized at the facility.

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

4. All records, analyses, and reports shall be retained for a minimum of five years from the date of generation. The most recent two years of data shall be kept on-site.

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

5. The Permittee shall maintain logs of all maintenance activities performed on the baghouse. These logs shall include the type of maintenance activity being performed and the duration of each maintenance activity, including the date, starting time, and ending time of the maintenance activities. These logs shall be maintained on-site and shall be readily available to ADEQ representatives upon request.

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

C. Reporting Requirements

The Permittee shall submit reports of all monitoring activities required in this Attachment along with the compliance certifications required by Section VII of Attachment "A".

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

II. CONCRETE BATCH PLANT

[A.A.C. R18-2-723]

This Section applies to concrete batching operations and material handling operations.

Opacity

A. Emission Limitations and Standards

1. The Permittee shall not cause, allow or permit visible emissions from nonpoint sources in excess of 40 percent opacity as measured by EPA Reference Method 9.

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

2. 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]

3. Operating Requirements

Fugitive dust emitted from the concrete batch plant shall be controlled in accordance with Section V of this Attachment.

[A.A.C. R18-2-723]

B. Air Pollution Control Requirements

1. Cement and Fly Ash Silos

a. The Permittee shall install, operate, and maintain a baghouse, in accordance

with vendor specifications to control emissions vented by the operation of the concrete batch plant during the loading and unloading of concrete, cement and flyash. If vendor specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of each baghouse. A copy of the vendor specifications or the operation and maintenance plan shall be kept on-site and made available to ADEQ upon request.

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

[Material Permit Condition is indicated by underline and italics]

- b. Loading of the cement silos shall be conducted in such a manner that the displaced air does not by-pass the baghouse and is not direct-vented to the atmosphere.

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

2. Product Delivery System

For truck-mix facilities, dust collector shall be installed and maintained on the product delivery system to minimize visible emissions during material transfer to trucks.

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

[Material Permit Condition is indicated by underline and italics]

C. Monitoring, Recordkeeping, and Reporting Requirements

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

1. The Permittee shall conduct a survey of visible emissions emanating from the concrete batch plant equipment by a certified EPA Reference Method 9 observer each month. If the opacity of the emissions observed appears to exceed the opacity limit, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee is required to keep records of the survey and any EPA Reference Method 9 observations performed, including date, time and name of the observer. If the observation results in an exceedance of the opacity limit, the Permittee is required to take corrective action and log all such actions. Any exceedance must be reported to ADEQ as an “excess emission”.
2. The Permittee shall conduct an EPA Reference Method 9 observation of visible emissions emanating from the concrete batch plant equipment by a certified EPA Reference Method 9 observer each quarter. The Permittee is required keep a record the results of the observation including date, time and name of the observer. If the observation results in an exceedance of the opacity limit, the Permittee is required to take corrective action and log all such actions. Any exceedance must be reported to ADEQ as an “excess emission”.

D. Permit Shield

Compliance with the terms of Section II of this Attachment shall be deemed compliance with the following applicable requirements: A.A.C. R18-2-614, -702.B and -723.

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

III. GENERATOR REQUIREMENTS

This Section applies to the Generator listed in Attachment “F”.

A. Fuel Limitations

1. Permitted Fuel Requirement [A.A.C. R18-2-306.A.2]

The Permittee shall **only** burn diesel fuel in the generator.

2. Record Keeping Requirements

The Permittee shall maintain copies of fuel supplier certifications which verify that the sulfur content of the fuel is less than the limit specified in Condition III.D.1 of this Attachment.

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

B. Operating Requirements

While collocating the concrete batch plant with a crushing and screening plant, covered by a general permit, the Permittee shall limit the combined horsepower rating for all the generators to less than 662 horsepower.

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

[Material Permit Condition is indicated by underline and italics]

C. Particulate Matter and Opacity

1. Emission Limitations and Standards

- a. The Permittee shall not cause or allow to be discharged into the atmosphere from the generator stack(s) particulate matter in excess of the amount calculated by the following equation: [A.A.C. R18-2-719.C.1]

$$E = 1.02 Q^{0.769}$$

Where:

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

Q = the heat input in million Btu per hour.

- b. For the purposes of the calculations required in Condition III.C.1.a. above, 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]

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

- i. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity.

- ii. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

2. Monitoring and Recordkeeping

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

- a. The Permittee shall have a certified EPA Reference Method 9 observer conduct a monthly survey of visible emissions emanating from the stack of the generator(s). If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified Method 9 observation. The Permittee shall keep records of the initial survey and any Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date & time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 40%, the Permittee shall report this to ADEQ as an excess emission and initiate appropriate corrective action to reduce the opacity below 40%. The Permittee shall keep a record of the corrective action performed.
- b. The Permittee shall keep records of fuel supplier certifications. The certification shall contain information regarding the name of fuel supplier and lower heating value of the fuel. These records shall be made available to ADEQ upon request.

3. Testing Requirement

The Permittee shall conduct performance tests at such times as may be required by the Director.

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

4. Permit Shield

Compliance with Section III.C of this Attachment shall be deemed compliance with A.A.C. R18-2-719.B, -719.C.1 and -719.E.

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

D. Sulfur Dioxide

1. Emission Limitations and Standards

- a. The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu heat input. [A.A.C. R18-2-719.F]
- b. The Permittee shall not burn high sulfur diesel fuel (sulfur content greater than 0.9 % by weight) in the generator(s). [A.A.C. R18-2-719.H]

2. Monitoring, Recordkeeping, and Reporting

- a. The Permittee shall keep daily records of the sulfur content and lower heating value of the fuel being fired in the generator(s). The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in Condition III.D.1.b. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request. [A.A.C. R18-2-306.A.3.c and -719.I]
- b. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.

3. Permit Shield

Compliance with Section III.D of this Attachment shall be deemed compliance with A.A.C. R18-2-719.F, -719.H, -719.I, and -719.J. [A.A.C. R18-2-325]

IV. WATER HEATER REQUIREMENTS

This Section is applicable to the 1.4 MMBtu/hour diesel fueled Powerflame water heater.

A. Fuel Limitation

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

The Permittee shall burn **only** diesel fuel in the water heater.

B. Particulate Matter

1. Emission Limitation

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

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

$$E = 1.02Q^{0.769}$$

Where:

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

Q = the heat input in million Btu per hour.

2. Permit Shield

Compliance with Section IV.B of this Attachment shall be deemed compliance with A.A.C. R18-2-724.C.1. [A.A.C. R18-2-325]

C. Opacity

1. Emission Limitations and Standards

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

The Permittee shall not cause, allow or permit the opacity of any plume or effluent from any water heater to exceed 15 percent.

2. Monitoring, Recordkeeping and Reporting Requirements

The Permittee shall conduct a monthly survey of visible emissions emanating from the stack of the water heater by a certified EPA Reference Method 9 observer. If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date & time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 15%, the Permittee shall report this to ADEQ as an excess emission and initiate appropriate corrective action

to reduce the opacity below 15%. The Permittee shall keep a record of the corrective action performed.

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

3. Permit Shield

Compliance with Section IV.C of this Attachment shall be deemed compliance with A.A.C. R18-2-724.J.

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

D. Sulfur Dioxide

1. Emissions Limitation

[A.A.C. R18-2-724.E and G]

a. The Permittee shall not cause, allow, or permit emissions of more than 1.0 pounds of sulfur dioxide per million Btu heat input.

b. The Permittee shall not burn high sulfur oil (fuel containing 0.90 percent or more by weight of sulfur) in the water heater.

2. Monitoring, Reporting and Record Keeping

The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in the Condition IV.D.1.b above. The certification shall contain the information with regard to sulfur content and the method used to determine the sulfur content of fuel. These records shall be made available to the ADEQ inspector upon request.

3. Permit Shield

Compliance with Section IV.D of this Attachment shall be deemed compliance with A.A.C. R18-2-724.E and G.

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

V. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Particulate Matter and Opacity

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

1. Emission Limitations/Standards

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

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

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

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

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

- i. 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]
- ii. 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]
- iii. 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]
- iv. 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]
- v. 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]
- vi. 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]
- vii. 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]
- viii. Any other method as proposed by the Permittee and approved by the Director. [A.A.C. R18-2-306.A.3.c]

2. Air Pollution Control Requirements

Haul Roads and Storage Piles

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

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

3. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Conditions V.B.1.c.i through V.B.1.c.viii above were performed and the control measures that were adopted.

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

b. Opacity Monitoring Requirements

- i. A certified Method 9 observer shall conduct a monthly visual survey of visible emissions from the fugitive dust sources. The Permittee shall keep a record of the name of the observer, the date and location on which the observation was made, and the results of the observation.

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

- (a) If the six-minute opacity of the visible emission is less than or equal to applicable opacity standard, the observer shall make a record of the following:

- (1) Location, date, and time of the observation; and
(2) The results of the Method 9 observation.

- (b) If the six-minute opacity of the visible emission exceeds applicable opacity standard, then the Permittee shall do the following:

- (1) Adjust or repair the controls or equipment to reduce opacity to below the applicable standard; and
(2) Report it as an excess emission under Section XII.A of Attachment "A".

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

4. Permit Shield

Compliance with Section V of this Attachment shall be deemed compliance with A.A.C. R18-2-604.A, -604.B, -605.A, -605.B, -606, -607.A, -607.B, -614 and -702.B.

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

VI. CONDITIONS SPECIFIC TO PORTABLE SOURCES

A. Equipment Identification

[A.A.C. R18-2-315.A.2 and -324.E]

The equipment serial number, utilizing not less than four-inch high characters, shall be stenciled on each permitted piece of equipment, and referenced in all correspondence with the Department.

B. Move Notice

[A.A.C. R18-2-324.D and A.A.C. R18-2-306.A.5]

A portable source may be transferred from one location to another provided that the Permittee of such equipment notifies the Director and any control officer who has jurisdiction over the geographic area that includes the new location of the transfer by certified mail at least ten (10) working days before the transfer. The notification shall include the following:

1. A description of **all** permitted equipment (under the same Permittee) which is going to be present at the site including the permit number, the manufacturer, the model number, the serial number, and equipment ID number(s) for such equipment;
2. The address and description of the present location of the equipment;
3. The address and description of the location to which the equipment is to be transferred, including the availability of all utilities, such as water and electricity, necessary for the proper operation of all control equipment;
4. The date on which equipment is to be moved; and
5. The date on which operation of the equipment will begin at the new location.

C. Renting or Leasing Permitted Equipment [A.A.C. R18-2-324.C]

In the case that equipment covered under this permit is rented or leased, this permit shall be provided by the Permittee to the renter or lessee, and the renter or lessee shall be bound by this permit's provisions. In the event a copy of the permit is not provided to the renter or lessee, both the Permittee and the renter or lessee shall be responsible for the operation of this equipment in compliance with the permit conditions and any violations thereof.

D. Portable Sources Operating Solely in One County [A.A.C. R18-2-324.A and -324.B]

A portable source that will operate for the duration of its permit solely in one county that has established a local air pollution control program pursuant to A.R.S. 49-479 shall obtain a permit from that county. A portable source with a county permit shall not operate in any other county until it receives a permit from the Arizona Department of Environmental Quality.

VII. MOBILE SOURCE REQUIREMENTS

A. Applicability

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

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

B. Particulate Matter and Opacity

1. Emission Limitations/Standards
 - a. Off-Road Machinery

The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than

ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway.

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

b. Roadway and Site Cleaning Machinery

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 per manufacturer's specifications.

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

3. Permit Shield

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

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

VIII. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

Particulate Matter and Opacity

1. Emission Limitations/Standards

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

- 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]

2. Monitoring and Recordkeeping Requirement

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.

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

3. Permit Shield

Compliance with Section VIII.A of this Attachment shall be deemed compliance with A.A.C. R18-2-702.B and -726.

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

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

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

- 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 shall not either:

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

photochemically reactive solvent.

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

iii. For the purposes of Conditions VIII.B.1.a.ii(a) and VIII.B.1.a.ii(b), 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 VIII.B.1.a.iii(a) through VIII.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 VIII.B.1.a.iii(a) through VIII.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 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;
- (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 VIII.B.1.b.i above.

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

c. **Permit Shield**

Compliance with Section VIII.B.1 of this Attachment shall be deemed compliance with A.A.C. R18-2-727. [A.A.C. R18-2-325]

2. Opacity

a. Emission Limitation/Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

b. Permit Shield

Compliance with Section VIII.B.2 of this Attachment shall be deemed compliance with A.A.C. R18-2-702.B. [A.A.C. R18-2-325]

C. Demolition/Renovation – Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants – Asbestos). [A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents. [A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with Section VIII.C of this Attachment shall be deemed compliance with A.A.C. R18-2-1101.A.8. [A.A.C. R18-2-325]

**ATTACHMENT “C”: ADDITIONAL CONDITIONS FOR
OPERATIONS INSIDE MARICOPA COUNTY**

**Air Quality Control Permit No. 49442
For
CEMEX Construction Materials South, LLC**

I. APPLICABILITY

[A.R.S. § 49-402(D)]

While operating in Maricopa County the Permittee shall comply with the Conditions set forth in Attachment “B” and Attachment “C”. Whenever more than one Condition in this Attachment regulating the same emissions applies to any emissions unit, or whenever a Condition in this Attachment and a Condition in Attachment "B" regulating the same emissions applies to any emissions unit, the Condition or combination of Conditions resulting in the lowest emissions rate or lowest concentration of regulated air pollutants released to the atmosphere shall apply, unless otherwise specifically exempted or designated in the applicable permit Conditions.

II. FACILITY WIDE REQUIREMENTS

A. Opacity

1. Operating Limitations

While operating in Maricopa County, the Permittee shall not operate the concrete batch plant for more than 9 hours per day and 3,088 hours in any rolling 12-month period.

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

[Material Permit Condition is indicated by underline and italics]

2. Emission Limitations and Standards

The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity for a period aggregating more than three minutes in any 60-minute period.

[Maricopa County Rule 300 §301]

[State and Locally enforceable only]

3. Permit Shield

Compliance with Section II.A of this Attachment shall be deemed compliance with Maricopa County Rule 300 §301.

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

B. Air Pollution Control Requirements

1. Material Containment Required

Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalis, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape, or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge, the

installation and use of such control methods, devices, or equipment shall be mandatory. [Maricopa County Rule 320 §302]

2. Stack Requirements

Where a stack, vent, or other outlet is at such a level that air contaminants are discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce, or eliminate the discharge of air contaminants to adjoining property. [Maricopa County Rule 320 §303]

3. Operations and Maintenance (O&M) Plan

For the purposes of the conditions of this Attachment, an emission control system (ECS) is a system for reducing emissions of particulates, consisting of both collection and control devices, which are approved in writing by the Director and are designed and operated in accordance with good engineering practices.

a. The Permittee shall provide and maintain, readily available on-site at all times, (an) O&M plan(s) for any ECS, any other emission processing equipment, and any ECS monitoring devices that are used pursuant to the conditions of this Attachment. [Maricopa County Rule 316 §305.1.a]

b. The Permittee shall submit to the Director for approval the O&M Plan(s) for each ECS and ECS monitoring device that is used pursuant to the conditions of this Attachment. [Maricopa County Rule 316 §305.1.b and 305.2.b]

c. The Permittee shall comply with all identified actions and schedules provided in each O&M Plan. [Maricopa County Rule 316 §305.1.c]

d. The Permittee shall provide and maintain, readily available on-site at all times, an O&M Plan for equipment associated with any process fugitive emissions and fugitive dust control measure (i.e., gravel pads, wheel washers, truck washers, rumble grates, watering systems, and street sweepers) that are implemented to comply with this permit. [Maricopa County Rule 316 §305.2.a]

e. The Permittee shall install, maintain, and calibrate monitoring devices described in the O&M Plan. The monitoring devices shall measure pressures, rates of flow, or other operating conditions necessary to determine if the control devices are functioning properly.

[Maricopa County Rule 316 §305.3]

[A.A.C. R18-2-306.01 and -331.A.3.c]

[State and Locally enforceable only]

[Material permit conditions are indicated by underline and italics]

f. The Permittee shall fully comply with all O&M Plans that the Permittee has submitted for approval, even if such O&M Plans have not yet been approved, unless notified in writing by the Director.

[Maricopa County Rule 316 §305.4]

4. Monitoring, Record keeping and Reporting Requirements

a. Opacity Requirements

- i. The Permittee shall conduct a weekly facility walk-through and observe visible emissions from all equipment capable of emitting visible emissions. The Permittee shall log the visual observations, including the date and time when the reading was taken, results of the readings, name of the person who took the readings, and any other related information.

[A.A.C. R18-2-306.A.3]
[State and Locally enforceable only]

- ii. Opacity shall be determined by observation to measure visible emissions from activities regulated by Sections 301 (excluding Section 301.1(e)), 302, or 303 of Maricopa County Rule 316 shall be conducted in accordance with the techniques specified in EPA Reference Method 203B (Visual Determination Of Opacity Of Emissions From Stationary Sources For Time-Exception Regulations), 40CFR Part 51, Appendix M, adopted as of July 1, 2007. Emissions shall not exceed the applicable opacity standards described in Section 301 (excluding Section 301.1(e)), Section 302, and Section 303 of Maricopa County Rule 316 for a period aggregating more than three minutes in any 60-minute period.

[Maricopa County Rule 316 §502.2]

b. Operational Recordkeeping

[Maricopa County Rule 316 §501.2.a]

The Permittee shall keep records for all days that the facility is actively operating. The records shall include all of the following:

- i. Hours of operation;
- ii. Type of batch plant (wet, dry, central);
- iii. Throughput per day of basic raw materials including sand, aggregate, cement (tons/day);
- iv. Volume of concrete produced per day (cubic yards/day);
- v. Volume of aggregate mined per day (cubic yards/day);
- vi. Amount of each basic raw materials including sand, aggregate, cement, flyash delivered per day (tons/day); and
- vii. The number of aggregate trucks, mixer trucks, or batch trucks exiting the facility.

c. Control and Monitoring Device Data

[Maricopa County Rule 316 §501.2.c]

- i. The Permittee shall keep records for all days that the facility is actively operating. The records shall include all of the following for a fabric filter baghouse:
 - (a) Date of inspection;
 - (b) Date and designation of bag replacement;

- (c) Date of service or maintenance related activities; and
 - (d) Time, date, and cause of fabric filter baghouse failure or down time, if applicable.
- ii. The Permittee shall keep records for all days that the facility is actively operating. The records shall include all of the following for watering systems (e.g., spray bars or an equivalent control):
 - (a) Date, time, and location of each moisture sampling point; and
 - (b) Results of moisture testing.
- d. The Permittee shall maintain all of the following Operating and Maintenance Plan records: [Maricopa County Rule 316 §501.3.a]
 - i. Periods of time that an approved emission control system is operating to comply with the conditions of this Attachment;
 - ii. Periods of time that an approved emission control system is not operating;
 - iii. Flow rates;
 - iv. Pressure drops;
 - v. Other conditions necessary to determine if the approved emission control system is functioning properly;
 - vi. Results of visual inspections; and
 - vii. Correction action taken, if necessary.
- e. For equipment associated with any process fugitive emissions and any fugitive dust control measures that are implemented to comply with the conditions of this Attachment: [Maricopa County Rule 316 §501.3.b]
 - i. A written record of self-inspection on each day that a facility is actively operating. Self-inspection records shall include daily inspections or in compliance with O&M Plan requirements, whichever is more frequent;
 - ii. Maintenance of street sweepers; and
 - iii. Maintenance of trackout control devices, gravel pads, wheel washers, and truck washers.
 - f. The Permittee shall keep all operational information required by Conditions b, c, and d above in a complete and consistent manner on-site and shall be made available without delay to the Director upon request. [Maricopa County Rule 316 §501.1]

- g. When operating inside of Maricopa County, the Permittee shall maintain a copy of all earth moving permits obtained from Maricopa County on-site and available for review upon request.

[A.A.C. R18-2-306.A.3.c and 306.A.4]

- h. When operating inside of Maricopa County, the Permittee shall maintain a copy of the most recently approved Dust Control Plan on-site and available for review upon request.

[A.A.C. R18-2-306.A.3.c and 306.A.4]

5. Permit Shield

Compliance with Section II.B of this Attachment shall be deemed compliance with Maricopa County Rule 320 §302, Maricopa County Rule 320 §303, Maricopa County Rule 316 §305.1.a, Maricopa County Rule 316 §305.1.b, Maricopa County Rule 316 §305.1.c, Maricopa County Rule 316 §305.2, Maricopa County Rule 316 §305.3, Maricopa County Rule 320 §305.4, Maricopa County Rule 316 §501.1, Maricopa County Rule 316 §501.2.a, Maricopa County Rule 316 §501.2.c, Maricopa County Rule 316 §501.3.a, Maricopa County Rule 316 §501.3.b, and Maricopa County Rule 316 §502.2.

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

III. CONCRETE BATCH PLANT REQUIREMENTS

Particulate Matter and Opacity

A. Emission Limitations/Standards

The Permittee shall not discharge or cause to be discharged into the ambient air:

- 1. Stack emissions exceeding 5% opacity; [Maricopa County Rule 316 §303.1.a]
- 2. Fugitive dust emissions exceeding 10% opacity from any affected operation or process source, excluding truck dumping directly into any screening operation, feed hopper or crusher. [Maricopa County Rule 316 §303.1.b]

B. Air Pollution Control Requirements

- 1. The Permittee shall implement the following process controls:
 - a. On all cement, lime, or flyash storage silo(s), the Permittee shall install an operational overflow warning system/device. The system/device shall be designed to alert operator(s) to stop the loading operation when the cement, lime, or flyash storage silo(s) are reaching a capacity that could adversely impact pollution abatement equipment. [Maricopa County Rule 316 §303.2.a]
 - b. On new cement, lime, or flyash storage silo(s) the Permittee shall install a properly sized fabric filter baghouse or equivalent device designed to meet a maximum outlet grain loading of 0.01 gr/dscf. [Maricopa County Rule 316 §303.2.b]
 - c. On dry mix concrete plant loading stations/truck mixed product, the Permittee shall implement one of the following process controls: [Maricopa County Rule 316 §303.2.c]

- i. Install a rubber fill tube;
 - ii. Install a water spray;
 - iii. Install a properly sized fabric filter baghouse or delivery system;
 - iv. Enclose mixer stations such that no visible emissions occur; or
 - v. Conduct mixer loading stations in an enclosed process building such that no visible emissions from the building occur during the mixing activities.
- d. On cement silo filling processing/loading operations controls, the Permittee shall install a pressure control system designed to shut-off cement silo filling processes/loading operations, if pressure from delivery truck is excessive, as defined in the O&M Plan.

[Maricopa County Rule 316 §303.2.d]

C. Monitoring, Record Keeping, and Reporting

- 1. The Permittee shall meet all of the monitoring and recordkeeping requirements specified in Condition II.C.1 and II.C.2 of Attachment “B” in order to comply with Condition III.A of this Attachment. [A.A.C. R18-2-306.A.3.c]
- 2. The Permittee shall keep accurate daily records of: [Maricopa County Rule 316 §501.2.a]
 - a. Hours of operation;
 - b. Throughput of raw materials processed in the plant in tons/day;
 - c. Amount of each raw material delivered to the plant in tons/day;
 - d. Amount of water used to control fugitive dust emissions from the process equipment.

D. Permit Shield

Compliance with Section III of this Attachment shall be deemed compliance with Maricopa County Rule 316 §303.1, Maricopa County Rule 316 §303.2 and Maricopa County Rule 316 §501.2.a. [A.A.C. R18-2-325]

IV. INTERNAL COMBUSTION ENGINE REQUIREMENTS

A. Applicability

The Conditions of this Section apply to any single existing or new stationary spark or compression-ignited reciprocating IC engine including stationary IC engines used in cogeneration, with a rating of greater than 250 brake horsepower (bhp). The Conditions of this Section also apply to a combination of IC engines each with a rated brake horsepower greater than 50 bhp used at a single source, whose maximum aggregate rated brake horsepower is greater than 250 bhp.

[Maricopa County Rule 324 §102]

B. Limitations for New and Existing Stationary IC Engines

The Permittee that meets the criteria listed in Section IV.A of this Attachment shall comply with either of the following:

[Maricopa County Rule 324 §301]

1. Use any fuel that contains no more than 0.05% sulfur by weight, alone or in combination with other fuels.
2. Use any waste derived fuel gas that contains no more than 0.08% sulfur by weight, alone or in combination with other fuels.

C. Good Combustion Practices / Tuning Procedure

[Maricopa County Rule 324 §302]

The Permittee shall conduct preventative maintenance or tuning procedures recommended by the engine manufacturer to ensure good combustion practices to minimize NOx emissions. A handheld monitor may be used if so desired by the Permittee for measurement of NOx, CO, and concentrations in the effluent stream after each adjustment is made. This may assist in determining that the proper adjustment has been made to ensure NOx and CO minimization. In lieu of a manufacturer's procedure, a different procedure specified by any other maintenance guideline may be used as a default procedure. The tuning procedure shall include all of the following, if so equipped, and appropriate to the type of engine:

1. Lubricating Oil and Filter: change once every three months or after no more than 300 hours of operation, whichever occurs last.
2. Inlet Air Filter: clean once every three months or after no more than 300 hours of operation and replace every 1,000 hours of operation or every year, whichever occurs last;
3. Fuel Filter: clean once every year or replace (if cartridge type) once every 1,000 hours of operation, whichever occurs last.
4. Check and adjust the following once every year or after no more than 1,000 hours of operation, whichever occurs last:
 - a. Intake and exhaust valves,
 - b. Spark plugs (if so equipped),
 - c.. Spark timing and dwell or fuel injection timing (if adjustable), and
 - d.. Carburetor mixture (if adjustable).
5. Spark Plugs and Ignition Points: replace after 3,000 hours of operation or every year whichever occurs last.
6. Coolant: change after 3,000 hours of operation or every year whichever occurs last.
7. Exhaust System: check for leaks or restrictions after 3,000 hours of operation or every year whichever occurs last.

D. Limitations – Opacity

The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity.

[Maricopa County Rule 324 §303]

E. Additional Limitations for Prime Engines > 250 Rated bhp

In addition to meeting the standards in Sections IV.B, IV.C, and IV.D of this Attachment, each existing or new prime engine greater than 250 rated bhp that is not listed in Sections 103, 104, or 105 of Maricopa County Rule 324, shall comply with the emissions limits or control technology requirements listed in the Table 1, 2, or 3, dependent upon the type of engine.

[Maricopa County Rule 324 §304]

NO_x EMISSION LIMITS OR CONTROL TECHNOLOGY REQUIREMENTS FOR EXISTING COMPRESSION-IGNITION ENGINES > 250 bhp

TABLE 1

RATED BRAKE HORSEPOWER (bhp)	ENGINE REQUIREMENTS
250-399	770 ppm _{dv} or 10 g/bhp-hr.NO _x or turbocharger with aftercooler/intercooler or 4-degree injection timing retard
400 plus	550 ppm _{dv} or 7.2 g/bhp-hr.NO _x or turbocharger with aftercooler/intercooler or 4-degree injection timing retard

EMISSION LIMITS OR CONTROL TECHNOLOGY REQUIREMENTS FOR EXISTING APPLICABLE SPARK- IGNITION ENGINES > 250 RATED bhp

TABLE 2

OXIDES OF NITROGEN (NO_x)	VOLATILE ORGANIC COMPOUND (VOC)	CARBON MONOXIDE (CO)
280 ppm _{dv} or 4.0 g/bhp-hr or three-way catalyst*	800 ppm _{dv} or 5.0 g/bhp-hr or three-way catalyst*	4,500 ppm _{dv} or three-way catalyst*

*The three-way catalyst shall provide a minimum of 80% control efficiency for NO_x and CO for those engines fueled with natural gas, propane or gasoline. In addition the three-way catalyst shall also provide a minimum of 50% control efficiency for VOC for those engines fueled by gasoline.

EMISSION LIMITS FOR NEW SPARK OR COMPRESSION-IGNITION ENGINES > 250 bhp

TABLE 3

ENGINE TYPE	NO_x	PM**	CO
LEAN BURN (SPARK)	110 ppmdv or 1.5 g/bhp-hr.	Not Applicable	4,500 ppmdv
RICH BURN (SPARK)	20 ppmdv or 0.30 g/bhp-hr.	Not Applicable	4,500 ppmdv
COMPRESSION	530 ppmdv or 6.9 g/bhp-hr.	0.40 g/bhp-hr	1,000 ppmdv

** A backhalf analysis shall be performed using reference Method 202 (referenced in subsection 504.6) each time a compliance test for particulate matter emissions to meet the limitations listed in Table 3 is performed using Method 5. The results of the Method 202 testing shall be used for emissions inventory purposes.

[Maricopa County Rule 324 §304]

F. Efficiency Allowance

Each emission limit expressed in Tables 1, 2 or 3 may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency shall be determined by one of the following methods whichever is higher:

[Maricopa County Rule 324 §305]

1. $E = (\text{Engine Output}) \times (100) \div (\text{Energy Input})$

Where,

Energy input is determined by a fuel measuring device accurate to +/- 5 % and is based upon the higher heating value (HHV) of the fuel. Percent efficiency (E) shall be averaged over 15 consecutive minutes and measured at peak load for the applicable engine.

2. $E = (\text{Manufacturers Rated Efficiency [Continuous] at (LHV)} \times (\text{LHV}) \div (\text{HHV}))$

Where,

LHV = the lower heating value of the fuel. Engine efficiency (E) shall not be less than 30 percent; an engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent for the purposes of Section IV.F of this Attachment.

G. Equivalent or Identical Engine Replacement

An equivalent or identical replacement engine that replaces an existing engine shall be treated as an existing engine for the purposes of compliance with this rule, unless the engine commenced operation or was constructed or modified after October 22, 2003, including the contractual obligation to undertake and complete an order for an engine and then it will be considered a new engine for purposes of meeting the conditions for a new engine in Section IV of this Attachment.

H. Compliance Schedule

The Permittee of an existing stationary IC engine that must be replaced with a new engine to meet emission limits listed in Section IV.A through Section IV.G of this Attachment shall be in compliance with the emission limits listed in Section IV.E of this Attachment, Table 3.

[Maricopa County Rule 324 §401]

I. Compliance Determination

1. Existing Engines

Existing IC engines or engine families shall demonstrate compliance with Section IV by recordkeeping according to Section IV.E. Emission testing using the applicable test methods listed in Section IV.K shall be performed if the Director requests.

[Maricopa County Rule 324 §501.1]

2. Existing Engine Families at a Source

When testing an engine family at one source, the number of engines tested should be the greater of either one engine or one third of all identical engines in the group. If any of the representative engines exceed the emission limits, each engine in the group shall demonstrate compliance by emissions testing.

[Maricopa County Rule 324 §501.2]

3. New Engines / New Engine Families

[Maricopa County Rule 324 §501.3]

Compliance with the limitations listed in Section IV.E of this Attachment, Table 3 shall be demonstrated by either:

- a. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture; or
- b. Performance of emission testing using the test methods listed in Section IV.K of this Attachment.

4. Low Sulfur Oil Verification

If the Director requests proof of the sulfur content, the Permittee shall submit fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the 0.05% limit shall be permitted if so desired by the Permittee for evidence of compliance.

[Maricopa County Rule 324 §501.4]

5. Waste - Derived Fuel Sulfur Verification

The Permittee shall submit documentation of the concentration of the sulfur level of the waste- derived fuel to the Director.

[Maricopa County Rule 324 §501.5]

6. Test Method Conditions

The Permittee shall use the test methods listed in Section IV.K of this Attachment to determine compliance with the limitations in Section IV.E, Tables 1-3 of this Attachment. Testing for stationary IC engines shall be completed under steady state conditions at either the maximum operating load or no less than 80% of the rated brake horsepower rating. If the Permittee of an engine demonstrates to the Director that the engine cannot operate at these conditions, then emissions source testing shall be performed at the highest achievable continuous brake horsepower rating or under the typical duty cycle or typical operational mode of the engine.

[Maricopa County Rule 324 §501.6]

J. Recordkeeping / Record Retention

The Permittee of any stationary IC engine subject to this Section IV of this Attachment shall comply with the following requirements and keep records for a period of 5 years:

1. The Permittee of any IC engine, including emergency engines, prime engines and low usage engines, shall keep a record that includes an initial one time entry that lists the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.

[Maricopa County Rule 324 §502.1]

2. The Permittee of a prime engine shall maintain a monthly record for prime engines which shall include:

[Maricopa County Rule 324 §502.2]

- a. Hours of operation;
- b. Type of fuel used, and
- c. Documentation verifying compliance with sulfur fuel content according to Subsection IV.B.1 of this Attachment.

3. The Permittee of a prime engine shall maintain an annual record of good combustion procedures according to Section IV.C of this Attachment.

[Maricopa County Rule 324 §502.3]

K. Test Methods Incorporated By Reference

[Maricopa County Rule 324 §503]

The Environmental Protection Agency (EPA) test methods as they exist in the Code of Federal Regulations (CFR) (July 1, 2004) and the American Society of Testing Materials International Methods as listed below, are incorporated by reference in Appendix G of the Maricopa County Rules and Regulations. When more than one test method is permitted for the same determination, as listed in Sections IV.K.12, IV.K.13, IV.K.14, or IV.K.15 of this Attachment, an exceedance of the limits established in this rule determined by any of the applicable test methods constitutes a violation. Copies of test methods referenced in Section IV.K of this Attachment are available at the Maricopa County Environmental Services Department, 1001 North Central Avenue, Suite 201, Phoenix, Arizona, 85004 -1942.

1. EPA Reference Methods 1 (“Sample and Velocity Traverses for Stationary Sources”) and 1A (“Sample and Velocity Traverses for Stationary Sources with Small Stacks and Ducts”) (40 CFR 60, Appendix A).
2. EPA Reference Methods 2 (“Determination of Stack Gas Velocity and Volumetric Flow Rate”), 2A (“Direct Measurement of Gas Volume Through Pipes and Small Ducts”), 2C (“Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts”), and 2D (“Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts”) (40 CFR 60, Appendix A).
3. EPA Reference Methods 3 (“Gas Analysis for the Determination of Dry Molecular Weight”), 3A (“Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)”), 3B (“Gas Analysis for the Determination of Emission Rate Correction Factor of Excess Air”), and 3C (“Determination of Carbon Dioxide, Methane, Nitrogen and Oxygen from Stationary Sources”) (40 CFR 60, Appendix A).
4. EPA Reference Method 4 (“Determination of Moisture Content in Stack Gases”) (40 CFR 60, Appendix A).
5. EPA Reference Method 5 (“Determination of Particulate Emissions from Stationary Sources”) (40 CFR 60, Appendix A).
6. EPA Reference Method 202 (“Determination of Condensable Particulate Emissions from Stationary Sources”) (40 CFR 51, Appendix M).
7. EPA Reference Methods 7 (“Determination of Nitrogen Oxide Emissions from Stationary Sources”), 7A (“Determination of Nitrogen Oxide Emissions from Stationary Sources - Ion chromatographic method”), 7B (“Determination of Nitrogen Oxide Emissions from Stationary Sources – Ultraviolet Spectrometry”), 7C (“Determination of Nitrogen Oxide Emissions from Stationary Sources – Alkaline-Permanganate Colorimetric Method”), 7D (“Determination of Nitrogen Oxide Emissions from Stationary Sources – Alkaline – Permanganate Chromatographic Method”), and 7E (“Determination of Nitrogen Oxide Emissions from Stationary Sources – Instrumental Analyzer Method”), (40 CFR 60, Appendix A).
8. EPA Reference Method 9 (“Visual Determination of the Opacity of Emissions from Stationary Sources”) (40 CFR 60, Appendix A).
9. EPA Reference Method 10 (“Determination of Carbon Monoxide from Stationary Sources”) (40 CFR 60, Appendix A).
10. EPA Reference Method 18 (“Measurement of Gaseous Organic Compound Emissions by Gas Chromatography”) (40 CFR 60, Appendix A).
11. EPA Reference Method 25A (“Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer”) (40 CFR 60, Appendix A).
12. American Society of Testing Materials International, ASTM Method D1266-98 (“Standard Test Method for Sulfur in Petroleum Products (Lamp Method)”), 1998.

13. American Society of Testing Materials International, ASTM Method D2622-98 (“Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry”), 1998.
14. American Society of Testing Materials International, ASTM Method D2880-71, 78 or 96 (“Standard Specification for Gas Turbine Fuel Oils”), 1971 or 1978 or 1996.
15. American Society of Testing Materials International, ASTM Method D4294-98 (“Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy”) 1990 or 1998.
16. American Society of Testing Materials International, ASTM Method D5504-01 (“Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence), 2006.

L. Permit Shield

Compliance with Section IV of this Attachment shall be deemed compliance with Maricopa County Rule 324 §102, Maricopa County Rule 324 §301, Maricopa County Rule 324 §302, Maricopa County Rule 324 §303, Maricopa County Rule 324 §304, Maricopa County Rule 324 §305, Maricopa County Rule 324 §306, Maricopa County Rule 324 §401, Maricopa County Rule 324 §501.1, Maricopa County Rule 324 §501.2, Maricopa County Rule 324 §501.3, Maricopa County Rule 324 §501.4, Maricopa County Rule 324 §501.5, Maricopa County Rule 324 §501.6, Maricopa County Rule 324 §502.1, Maricopa County Rule 324 §502.2, Maricopa County Rule 324 §502.3 and Maricopa County Rule 324 §503.

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

V. FUGITIVE DUST REQUIREMENTS

A. Emission and Operational Limitations

1. Opacity

For emissions that are not already regulated by an opacity limit, the Permittee shall not discharge, cause or allow to be discharged into the ambient air fugitive dust emissions exceeding 20% opacity, in accordance with the test methods described in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules.

[Maricopa County Rule 316 §306.1]

2. Visible Emission Limitation Beyond Property Line

The Permittee shall not cause or allow fugitive dust emissions from any active operation, open storage pile, or disturbed surface area associated with such facility such that the presence of such fugitive dust emissions remain visible in the atmosphere beyond the property line of such facility.

[Maricopa County Rule 316 §306.2]

3. Wind Events

The fugitive dust emission limitations described in Conditions V.A.1 and V.A.2 of this Attachment shall not apply during a wind event, if the Permittee meets the following conditions:

- a. Has implemented the fugitive dust control measures described in Condition V.B of this Attachment, as applicable; [Maricopa County Rule 316 §306.3.a]
- b. Has compiled and retained records, in accordance with Section V.C.4 of this Attachment, which state that a Permittee shall compile, maintain, and retain records as described in Maricopa County Rule 310 (Fugitive Dust), and has documented by records the occurrence of a wind event on the day(s) in question. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked; and [Maricopa County Rule 316 §306.3.b]
- c. Has implemented the following high wind fugitive dust control measures, as applicable: [Maricopa County Rule 316 §306.3.c]
- i. For an active operation, implement one of the following fugitive dust control measures;
- (a) Cease active operation that may contribute to an exceedance of the fugitive dust emission limitations described in Section V.A.1 of this Attachment for the duration of the wind event and, if active operation is ceased for the remainder of the work day, stabilize the area; or
- (b) Before and during active operations, apply water or other suitable dust suppressant other than water to keep the soil visibly moist.
- ii. For an inactive open storage pile, implement one of the following fugitive dust control measures, in accordance with the test method described in Condition V.D.2 and V.D.2.a of this Attachment, and in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules:
- (a) Maintain a soil crust by applying water or other suitable dust suppressant other than water or by implementing another fugitive dust control measure, in sufficient quantities to meet the stabilization standards described in Condition V.D.2.b of this Attachment.
- (b) Cover open storage pile with tarps, plastic, or other material such that wind will not remove the covering, if open storage pile is less than eight feet high.
- iii. For a disturbed surface area, implement one of the following fugitive dust control measures, in accordance with the test methods described in Condition V.D.2 and V.D.2.a of this Attachment, and in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules:

- (a) Uniformly apply and maintain surface gravel or a dust suppressant other than water; or
- (b) Maintain a visible crust by applying water or other suitable dust suppressant other than water or by implementing another fugitive dust control measure, in sufficient quantities to meet the stabilization standards described in Condition V.D.2.b of this Attachment.

4. Silt Loading and Silt Content Standards for Unpaved Roads and Unpaved Parking and Staging Areas

From unpaved roads and unpaved parking and staging areas, the Permittee shall not discharge or allow to be discharged into the ambient air fugitive dust emissions exceeding 20% opacity, in accordance with the test methods described in Section 502 of Maricopa County Rule 316 and in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules, and one of the following:

- a. For unpaved roads, silt loading equal to or greater than 0.33 oz/ft²; or silt content exceeding 6%.
- b. For unpaved parking and staging areas, silt loading equal to or greater than 0.33 oz/ft² or silt content exceeding 8%.

[Maricopa County Rule 316 §306.4]

5. Stabilization Standards

- a. For open areas, disturbed surface soils, and open storage piles, the Permittee shall meet at least one of the requirements listed below, as applicable.

[Maricopa County Rule 316 §306.5.a]

- i. Maintain a soil crust;
- ii. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
- iii. Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
- iv. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;
- v. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;

- vi. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
 - vii. Comply with a standard of an alternative test method, upon obtaining the written approval from the Director and the Administrator of the Environmental Protection Agency (EPA).
- b. If no activity is occurring on an open storage pile and material handling or surface soils where support equipment and vehicles operate in association with such facility, and if an open storage pile and material handling or surface soils where support equipment and vehicles operate in association with such facility contain more than one type of disturbance, soil, vegetation, or other characteristics which are visibly distinguishable, each representative surface shall be tested separately for stability in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described Condition V.D.2.b of this Attachment and in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules.

[Maricopa County Rule 316 §306.5.b]

B. Air Pollution Control Requirements

The Permittee shall implement the fugitive dust control measures described in this Section. Any fugitive dust control measure that is implemented shall achieve the applicable standard(s) described Condition V.A of this Attachment, as determined by the corresponding test method(s), as applicable.

The Permittee may submit a request to the Director and the Administrator of the Environmental Protection Agency (EPA) for the use of alternative control measure(s). The request shall include the proposed alternative control measure, the control measure that the alternative would replace, and a detailed statement or report demonstrating that the measure would result in equivalent or better emission control than the measures outlined in Section V.B of this Attachment.

[Maricopa County Rule 316 §307]

1. Open Storage Piles and Material Handling

The Permittee shall implement all of the following fugitive dust control measures, as applicable, in compliance with Conditions V.A.1 through V.A.5 of this Attachment. Open storage pile(s) and material handling does not include berms and guard rails that are installed to comply with 30 CFR 56.93000. However, such berms and guard rails shall be installed and maintained in compliance with Condition V.A.1, Condition V.A.2 and Condition V.A.5 of this Attachment.

[Maricopa County Rule 316 §307.1]

- a. Prior to or while conducting stacking, loading, and unloading operations, implement one of the following fugitive dust control measures:
 - i. Spray material with water, as necessary; or
 - ii. Spray material with a dust suppressant other than water, as necessary.

[Maricopa County Rule 316 §307.1.a]

- b. When not conducting stacking, loading, and unloading operation implement one of the following fugitive dust control measures:

[Maricopa County Rule 316 §307.1.b]

- i. Spray material with water, as necessary;
- ii. Maintain a 1.5% or more soil moisture content of the open storage pile(s);
- iii. Locate open storage pile(s) in a pit/in the bottom of a pit;
- iv. Arrange open storage pile(s) such that storage pile(s) of larger diameter products are on the perimeter and act as barriers to/for open storage pile(s) that could create fugitive dust emissions;
- v. Construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%; or
- vi. Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings.

- c. When installing new open storage pile(s) at an existing facility or when installing new open storage pile(s) at a new facility, the Permittee shall implement all of the following fugitive dust control measures, only if it is determined to be feasible on a case-by-case basis through the Dust Control Plan by assessing the amount of open land available at the property at the time the new open storage pile(s) are formed:

[Maricopa County Rule 316 §307.1.c]

- i. Install the open storage pile(s) at least 25 feet from the property line; and
- ii. Limit the height of the open storage pile(s) to less than 45 feet.

- d. For existing open storage pile(s) and when installing open storage pile(s) for an existing facility or for a new facility, if such open storage pile(s) will be constructed over eight feet high and will not be covered, then the Permittee shall install, use, and maintain a water truck or other method that is capable of completely wetting the surfaces of open storage pile(s).

[Maricopa County Rule 316 §307.1.d]

2. Surface Stabilization Where Support Equipment and Vehicles Operate

The Permittee shall implement one of the following fugitive dust control measures on areas other than the areas identified in Condition V.B.3 or Condition V.B.4 of this Attachment where loaders, support equipment, and vehicles operate.

- a. Pre-water surface soils;

- b. Apply and maintain a dust suppressant, other than water; or
- c. Apply a gravel pad, in compliance with the Condition V.B.6.b.iv of this Attachment. [Maricopa County Rule 316 §307.2]

3. Haul/Access Roads

- a. The Permittee shall implement one of the following fugitive dust control measures, as applicable, before engaging in the use of, or in the maintenance of, haul/access roads. Compliance with the provisions of Section V.B.3 of this Attachment shall not relieve the Permittee from complying with any other federally enforceable requirements (i.e., a permit issued under Section 404 of the Clean Water Act). [Maricopa County Rule 316 §307.3.a]
 - i. Install and maintain bumps, humps, or dips for speed control and apply water, as necessary;
 - ii. Limit vehicle speeds and apply water, as necessary;
 - iii. Pave;
 - iv. Apply and maintain a gravel pad in compliance with Condition V.B.6.b.iv of this Attachment;
 - v. Apply a dust suppressant, other than water; or
 - vi. Install and maintain a cohesive hard surface.
- b. For a new facility, if implementing one of the fugitive dust control measures described in Condition V.B.3.a of this Attachment, is determined to be technically infeasible as obtained/approved in writing by the Director and the Administrator of the Environmental Protection Agency (EPA) and as approved in the Dust Control Plan, then the Permittee shall maintain a minimum distance of 25 feet from the property line for haul/access roads associated with the new facility. [Maricopa County Rule 316 §307.3.b]

4. On-Site Traffic

- a. The Permittee shall require all batch trucks and material delivery trucks to remain on internal roads with paved surfaces or cohesive hard surfaces. [Maricopa County Rule 316 §307.4.a]
- b. The Permittee shall require all aggregate trucks to remain on paved surfaces or cohesive hard surfaces, except when driving on roads leading to and from aggregate loading areas/loading operations, as approved in the Dust Control Plan. [Maricopa County Rule 316 §307.4.b]
- c. The Permittee shall require all batch trucks and material delivery trucks to enter and exit the facility/operation only through entrances that comply with the trackout requirements in Condition V.B.6 of this Attachment. [Maricopa County Rule 316 §307.4.c]

- d. The Permittee shall pave or install a cohesive hard surface on permanent areas of a facility on which vehicles drive, as approved in the Dust Control Plan.

[Maricopa County Rule 316 §307.4.d]

5. Off-Site Traffic

When hauling or transporting bulk material off-site, the Permittee shall implement all of the following control measures:

- a. Load all haul trucks such that the freeboard is not less than three inches;
[Maricopa County Rule 316 §307.5.a]
- b. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, or tailgate(s); and
[Maricopa County Rule 316 §307.5.b]
- c. Cover haul trucks with a tarp or other suitable closure.
[Maricopa County Rule 316 §307.5.c]

6. Trackout

- a. Rumble Grate And Wheel Washer:

The Permittee of a new or existing permanent facility with a minimum of 60 aggregate trucks, mixer trucks, or batch trucks exiting a facility on any day onto paved public roadways/paved areas accessible to the public shall install, maintain, and use a rumble grate and wheel washer, in accordance with all of the following conditions, as applicable. A vehicle wash or a cosmetic wash may be substituted for a wheel washer, provided such vehicle wash or cosmetic wash has at least 40 pounds per square inch (psi) water spray from the nozzle (the Permittee shall have a water pressure gauge available on-site to allow verification of such water pressure), meets the definition of wheel washer (i.e., is capable of washing the entire circumference of each wheel of the vehicle), is operated in such a way that visible deposits are removed from the entire circumference of each wheel of the vehicle exiting the wash, is installed, maintained, and used in accordance with Conditions V.B.6.a.i through V.B.6.a.v of this Attachment listed below, and is approved in the Dust Control Plan for the facility.

[Maricopa County Rule 316 §307.6.a]

- i. The Permittee shall locate a rumble grate within 10 feet from a wheel washer.
 - (a) The rumble grate and wheel washer shall be located no less than 30 feet prior to each exit that leads to a paved public roadway/paved area accessible to the public and that is used by aggregate trucks, mixer trucks or batch trucks.
 - (b) The Permittee may be allowed to install a rumble grate and wheel washer less than 30 feet prior to each exit if the Permittee demonstrates to the Director that there is not adequate space to install a rumble grate and wheel washer no less than 30 feet prior to each exit and that a rumble grate

and wheel washer at a shorter distance will be adequate to prevent trackout.

- (c) A rumble grate shall consist of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle as the entire circumference of each wheel of the vehicle passes over the rumble grate.
- ii. The Permittee shall ensure that all aggregate trucks, mixer trucks, or batch trucks exit the facility via the rumble grate first and then the wheel washer.
- iii. The Permittee shall post a sign by the rumble grate and wheel washer to designate the speed limit as 5 miles per hour.
- iv. The Permittee shall pave the internal roads from the rumble grate and wheel washer to the facility exits leading to paved public roadways/paved areas accessible to the public.
- v. The Permittee shall ensure that all aggregate trucks, mixer trucks, or batch trucks remain on the paved roads between the rumble grate and wheel washer and the facility exits leading to paved public roadways/paved areas accessible to the public.

b. Rumble Grate, Wheel Washer, Or Truck Washer:

A Permittee not subject to Condition V.B.6.a of this Attachment, shall install, maintain, and use a rumble grate, wheel washer, or truck washer in accordance with all of the following:

[Maricopa County Rule 316 §307.6.b]

- i. A rumble grate, wheel washer, or truck washer shall be located no less than 30 feet prior to each exit that leads to a paved public roadway/paved area accessible to the public and that is used by aggregate trucks, mixer trucks, or batch trucks.
 - (a) The Permittee may be allowed to install a rumble grate, wheel washer, or truck washer less than 30 feet prior to each exit if the Permittee demonstrates to the Director that there is not adequate space to install a rumble grate, wheel washer, or truck washer no less than 30 feet prior to each exit and that a rumble grate, wheel washer, or truck washer at a shorter distance will be adequate to prevent trackout.
 - (b) A rumble grate shall consist of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle as the entire circumference of each wheel of the vehicle passes over the rumble grate.

- ii. The Permittee shall ensure that all aggregate trucks, mixer trucks, or batch trucks exit the facility via a rumble grate, wheel washer, or truck washer.
- iii. The Permittee shall post a sign by the rumble grate, wheel washer, or truck washer to designate the speed limit as 5 miles per hour.
- iv. If haul/access roads/internal roads are unpaved between the rumble grate, wheel washer, or truck washer and the facility exits leading to paved public roadways/paved areas accessible to the public, a gravel pad shall be installed, maintained, and used from the rumble grate, wheel washer, or truck washer to such paved public roadways/paved areas accessible to the public in accordance with all of the following:
 - [Maricopa County Rule 316 §307.6.b(4)]
 - (a) Gravel pad shall be designed with a layer of washed gravel, rock, or crushed rock that is at least one inch or larger in diameter and 6 inches deep, 30 feet wide, and 50 feet long and shall be flushed with water or completely replaced as necessary to comply with the trackout threshold described in Condition V.B.6.d of this Attachment.
 - (b) Gravel pad shall have a gravel pad stabilizing mechanism/device (i.e., curbs or structural devices along the perimeter of the gravel pad) and shall be flushed with water or completely replaced as necessary to comply with the trackout threshold described in Condition V.B.6.d of this Attachment.

c. Exemptions For Wheel Washers:

The Permittee shall not be required to install, maintain, and use a wheel washer, if any one of the following are applicable:

[Maricopa County Rule 316 §307.6.c]

- i. A facility has all paved internal roads and meters aggregate or related materials directly to a ready-mix or hot mix asphalt truck, with the exception of returned products. The Permittee shall install, maintain, and use a rumble grate in compliance with Condition V.B.6.b of this Attachment.
- ii. A facility is less than 5 acres in land size and handles recycled asphalt and recycled concrete exclusively. The Permittee shall install, maintain, and use a rumble grate in compliance with Condition V.B.6.b of this Attachment and shall install a gravel pad in compliance with Condition V.B.6.b.iv of this Attachment on all unpaved roads leading to the facility exits leading to paved public roadways/paved areas accessible to the public.
- iii. A facility has a minimum of ¼ mile paved roads leading from a rumble grate to the facility exits leading to paved public roadways/paved areas accessible to the public.

d. Trackout Distance:

The Permittee shall not allow trackout to extend a cumulative distance of 25 linear feet or more from all facility exits onto paved areas accessible to the public. Notwithstanding the proceeding, the Permittee shall clean up all other trackout at the end of the workday.

[Maricopa County Rule 316 §307.6.d]

e. Cleaning Paved Internal Roads:

The Permittee shall clean all paved internal roads in accordance with all of the following as applicable:

[Maricopa County Rule 316 §307.6.e]

- i. If the Permittee has a minimum of 60 aggregate trucks, mixer trucks, or batch trucks exiting the facility on any day and if there is evidence of dirt or other bulk material extending a cumulative distance of 12 linear feet or more on any paved internal road, then the Permittee shall sweep the paved internal roads with a street sweeper by the end of each production work shift.
- ii. The Permittee with less than 60 aggregate trucks, mixer trucks, or batch trucks exiting the facility on any day shall sweep the paved internal roads with a street sweeper by the end of every other work day. On the days that paved roads are not swept, the Permittee shall apply water as necessary to comply with Condition V.A of this Attachment, on at least 100 feet of paved roads or the entire length of paved roads leading to an exit to paved roads leading to an exit to paved public roadways/paved areas accessible to the public, if such roadways are less than 100 feet long.
- iii. The Permittee, who purchases street sweepers after June 8, 2005, shall purchase street sweepers that meet the criteria of PM₁₀ efficient South Coast Air Quality Management Rule 1186 certified street sweepers.
- iv. The Permittee shall use South Coast Air Quality Management Rule 1186 certified street sweepers to sweep paved roads.

7. Pad Construction for Processing Equipment

The Permittee shall implement, maintain, and use fugitive dust control measures during the construction of pads for processing equipment and shall identify, in the Dust Control Plan, such fugitive dust control measures.

[Maricopa County Rule 316 §307.7]

8. Spillage

In addition to complying with the fugitive dust emission limitations described in Condition V.A of this Attachment and implementing fugitive dust control measures described in Conditions V.B.1 through V.B.9 of this Attachment, as applicable, the Permittee shall implement one of the following fugitive dust control measures, as applicable, when spillage occurs:

[Maricopa County Rule 316 §307.8]

- a. Promptly remove any pile of spillage on paved haul/access roads/paved

internal roads; or

- b. Maintain in a stabilized condition any pile of spillage on paved haul/access roads/paved internal roads and remove such pile by the end of each day; and
- c. Maintain in a stabilized condition all other piles of spillage with dust suppressants until removal.

9. Night-Time Operations

The Permittee shall implement, maintain, and use fugitive dust control measures at night, as approved in the Dust Control Plan.

[Maricopa County Rule 316 §307.9]

C. Monitoring, Recordkeeping, and Reporting

1. Fugitive Dust Control Technician

The Permittee with a rated or permitted capacity of 25 tons or more of material per hour shall have in place a Fugitive Dust Control Technician or his designee, who shall meet all of the following qualifications:

- a. Be authorized by Permittee to conduct routine inspections, recordkeeping, and reporting to ensure that all fugitive dust control measures are installed, maintained, and used in compliance with the conditions of this Attachment.

[Maricopa County Rule 316 §309.1]

- b. Be trained in accordance with the Comprehensive Dust Control Training Class conducted or approved by the Director, successfully completed, at least once every three years such Comprehensive Dust Control Training Class, and have a valid dust training certification identification card readily accessible on-site while acting as a Fugitive Dust Control Technician.

[Maricopa County Rule 316 §309.2]

Basic Dust Control Training Class:

- i. A site superintendent or other designated on-site representative of the Permittee, water truck drivers, and water pull drivers shall have successfully completed the Basic Dust Control Training Class, as described in Sections V.C.1.b.ii through V.C.1.b.iv. of this Attachment.

[Maricopa County Rule 316 §401.4]

- ii. At least once every three years, the site superintendent or other designated on-site representative of the Permittee, if present at a site that has more than one acre of disturbed surface area that is subject to a permit issued by the Director requiring control of PM₁₀ emissions from dust generating operation, shall successfully complete a Basic Dust Control Training Class conducted or approved by the Director.

[Maricopa County Rule 316 §310.1]

- iii. At least once every three years, water truck and water-pull drivers

shall successfully complete a Basic Dust Control Training Class conducted or approved by the Director.

[Maricopa County Rule 316 §310.2]

- iv. All persons having successfully completed training during the 2006 and 2007 calendar years shall be deemed to have satisfied the requirement to successfully complete the Basic Dust Control Training Class, if the training that was completed was conducted or approved by the Director. Completion of the Comprehensive Dust Control Training Class, as required in Condition V.C.1.b of this Attachment, shall satisfy the requirement of Section V of this Attachment.

[Maricopa County Rule 316 §310.3]

- c. Be authorized by the Permittee to install, maintain, and use fugitive dust control measures, deploy resources, and shutdown or modify activities as needed.

[Maricopa County Rule 316 §309.3]

- d. Be on-site at all times during primary dust generating operations related to the purposes for which the permit was obtained.

[Maricopa County Rule 316 §309.4]

- e. Be certified to determine opacity as visible emissions in accordance with the provisions of the EPA Method 9 as specified in 40 CFR, Part 60, Appendix A.

[Maricopa County Rule 316 §309.5]

- f. Be authorized by the Permittee to ensure that the site superintendent or other designated on-site representative of the Permittee and water truck and water pull drivers for each site be trained in accordance with the Basic Dust Control Training Class conducted or approved by the Director with jurisdiction over the site, and successfully complete, at least once every three years, such Basic Dust Control Training Class.

[Maricopa County Rule 316 §309.6]

2. Opacity Monitoring

- a. Opacity monitoring of fugitive visible emissions shall be conducted in accordance with the test methods described in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules.

[Maricopa County Rule 316 §502.2]

- b. A certified Method 9 observer shall conduct a monthly visual survey of visible emissions from the fugitive sources. The Permittee shall keep records of the name of observer, date, time, and result of the survey and observation.

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

- c. If the observer sees a plume from a fugitive source that on an instantaneous basis appears to exceed 20%, then the observer shall, if practicable, take a Method 9 observation of the plume in accordance with Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules.

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

- d. If the opacity of the plume is less than 20%, the observer shall make a record of the following:

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

- i. Location, date, and time of the observation; and
 - ii. The results of the Method 9 observation.
- c. If the opacity of the plume exceeds 20%, then the Permittee shall do the following: [A.A.C. R18-2-306.A.3]
- i. Adjust or repair the controls or equipment to reduce opacity to below 20%; and
 - ii. Report it as an excess emission under Section XII.A of Attachment "A".

3. Dust Control Plan

- a. The Permittee shall submit, to the Director, a Dust Control Plan that describes all fugitive dust control measures to be implemented, in order to comply with Conditions II.B.3, V.A, V.B, and V.C.1 of this Attachment. [Maricopa County Rule 316 §311.1]
- b. The Permittee shall submit to the Director a Dust Control Plan that describes all equipment associated with any process fugitive emissions to be implemented, in order to comply with Condition II.B.3 of this Attachment. If an alternative plan for conducting required soil moisture tests is approved by the Director, included in a Dust Control Plan, and implemented by the Permittee and if the Director determines that such alternative plan included in a Dust Control Plan has been followed, yet fugitive dust emissions still exceed the standards of the conditions of this Attachment, then the Director shall issue a written notice to the Permittee explaining such determination. The Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Director within three working days of receipt of the Director's written notice, unless such time period is extended by the Director, upon request, for good cause. During the time that the Permittee is preparing revisions to the Dust Control Plan, the Permittee must still comply with all requirements of Section V of this Attachment. [Maricopa County Rule 316 §311.2]
- c. The Dust Control Plan shall contain all the information described in Maricopa County Rule 310 (Fugitive Dust from Dust Generating Operations). [Maricopa County Rule 316 §311.3]
- d. All other criteria associated with the Dust Control Plan shall meet the criteria described in Maricopa County Rule 310 (Fugitive Dust from Dust Generating Operations). [Maricopa County Rule 316 §311.4]
- e. The Director shall approve, disapprove, or conditionally approve the Dust Control Plan, in accordance with the criteria used to approve, disapprove, or conditionally approve a permit. Failure to comply with the provisions of an approved Dust Control Plan shall be deemed a violation of Section V of this Attachment. [Maricopa County Rule 316 §311.5]
- f. With each move notice regarding portable sources, the Permittee of a facility shall submit, to the Director, a Dust Control Plan that meets the requirements

4. Dust Control Plan Records

The Permittee shall compile, maintain, and retain a written record of self-inspection of all fugitive dust control measures implemented, in order to comply with the Dust Control Plan, on each day that the facility is actively operating. Self-inspection records shall include information as described in Maricopa County Rule 310 (Fugitive Dust).

[Maricopa County Rule 316 §501.4]

5. Basic Dust Control Training Class Records

The Permittee shall compile, maintain, and retain written records for each employee subject to Sections V.C.1.b.ii through V.C.1.b.iv of this Attachment. Such written records shall include the name of the employee, the date of the Basic Dust Control Training Class that such employee successfully completed, and the name of the agency/representative who conducted such class.

[Maricopa County Rule 316 §501.5]

6. Soil Moisture Testing For Watering Systems

a. If twice daily moisture sampling is required, such sampling shall be conducted within one hour of startup and again at 3 pm or within one hour prior to daily shutdown but no less frequently than once every 8-hour period.

[Maricopa County Rule 316 §502.3.a]

b. If daily moisture sampling is required, such sampling shall be conducted within one hour after startup.

[Maricopa County Rule 316 §502.3.b]

D. Testing Requirements

1. The Permittee shall conduct performance tests for soil stabilization and moisture content as required by the Director.

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

2. To determine compliance with the fugitive dust emission limitations described in the stabilization standards described in Section V.A.5 of this Attachment, opacity observations shall be conducted in accordance with the techniques specified in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules.

[Maricopa County Rule 316 §503]

a. Soil Moisture Content and Soil Compaction Characteristic Test Methods

[Maricopa County Rule 316 §504]

i. ASTM Method D2216-05 ("Standard Test Method For Laboratory Determination Of Water (Moisture) Content Of Soil And Rock By Mass"), 2005 edition.

ii. ASTM Method D1557-02e1 ("Test Method For Laboratory Compaction Characteristics Of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³))"), 2002 edition.

b. Stabilization Standards Test Methods

[Maricopa County Rule 316 §505]

- i. Appendix C, Section 2.1.2 (Silt Content Test Method) of the Maricopa County Rules to estimate the silt content of the trafficked parts of unpaved roads (not to exceed 6%) and unpaved parking lots (not to exceed 8%).
- ii. Appendix C, Section 2.3 (Test Methods for Stabilization-Soil Crust Determination) the Drop Ball Test of the Maricopa County Rules for soil crust.
- iii. Appendix C, Section 2.4 (Test Methods for Stabilization-Determination of Threshold Friction Velocity (TFV) (Sieving Field Procedure)) of the Maricopa County Rules for threshold friction velocity (TFV) corrected for non-erodible elements of 100 cm/second or higher.
- iv. Appendix C, Section 2.5 (Test Methods For Stabilization-Determination Of Flat Vegetative Cover) of the Maricopa County Rules for flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%.
- v. Appendix C, Section 2.6 (Test Methods for Stabilization-Determination of Standing Vegetative Cover) of the Maricopa County Rules for standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%.
- vi. Appendix C, Section 2.6 (Test Methods For Stabilization-Determination Of Standing Vegetative Cover) of the Maricopa County Rules for standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements.
- vii. Appendix C, Section 2.7 (Test Methods For Stabilization-Rock Test Method) of the Maricopa County Rules for a percent cover that is equal to or greater than 10%, for non-erodible elements.
- viii. An alternative test method approved in writing by the Director and the Administrator of the EPA.

E. Facility Information Sign

The Permittee shall erect and maintain a facility information sign at the main entrance such that members of the public can easily view and read the sign at all times. Such sign shall have a white background, have black block lettering that is at least four inches high, and shall contain at least all of the following information:

[Maricopa County Rule 316 §308]

1. Facility name and Permittee's name;

2. Current number of the air quality permit or of authority to operate under a general permit;
3. Name and local phone number of person(s) responsible for dust control matters; and
4. Text stating: “Dust complaints? Call Maricopa County Air Quality Department- (Insert the accurate Maricopa County Air Quality Department complaint line telephone number).”

F. Permit Shield

Compliance with the Section V of this Attachment shall be deemed compliance with Maricopa County Rule 316 §306.1, Maricopa County Rule 316 §306.2, Maricopa County Rule 316 §306.3, Maricopa County Rule 316 §306.4, Maricopa County Rule 316 §306.5, Maricopa County Rule 316 §307.1, Maricopa County Rule 316 §307.2, Maricopa County Rule 316 §307.3, Maricopa County Rule 316 §307.4, Maricopa County Rule 316 §307.5, Maricopa County Rule 316 §307.6, Maricopa County Rule 316 §307.7, Maricopa County Rule 316 §307.8, Maricopa County Rule 316 §307.9, Maricopa County Rule 316 §308, Maricopa County Rule 316 §309, Maricopa County Rule 316 §310, Maricopa County Rule 316 §311, Maricopa County Rule 316 §401.4, Maricopa County Rule 316 §501.4, Maricopa County Rule 316 §501.5, Maricopa County Rule 316 §502.2, Maricopa County Rule 316 §502.3.a, Maricopa County Rule 316 §502.3.b, Maricopa County Rule 316 §503, Maricopa County Rule 316 §504 and Maricopa County Rule 316 §505.

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

VI. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

1. Applicability

These conditions shall apply to all abrasive blasting operations unless they meet the following criteria:

- a. Self-contained, enclosed abrasive blasting equipment that is not vented to the atmosphere or is vented inside a building with the exhaust directed away from any opening to the building exterior, or
- b. Hydroblasting. [Maricopa County Rule 312 §103]

2. Limitations for Blasting

All abrasive blasting operations shall be performed in a confined enclosure, unless one of the following conditions are met, in which case unconfined blasting according to Section VI.A.3 of this Attachment may be performed:

[Maricopa County Rule 312 §301]

- a. The item to be blasted exceeds 8 feet in any one dimension, or
- b. The surface being blasted is fixed in a permanent location, cannot easily be moved into a confined enclosure, and the surface is not normally dismantled or moved prior to abrasive blasting.

3. Requirements for unconfined blasting:

[Maricopa County Rule 312 §302]

At least one of the following control measures shall be used;

- a. Wet abrasive blasting,
- b. Vacuum blasting, or
- c. Dry abrasive blasting, provided that all of the following conditions are met:
 - i. Perform only on a metal substrate.
 - ii. Use only certified abrasive for dry unconfined blasting.
 - iii. Blast only paint that is lead free (i.e. the lead content is less than 0.1 percent).
 - iv. Perform the abrasive blasting operation directed away from unpaved surfaces.
 - v. Use the certified abrasive not more than once unless contaminants are separated from the abrasive through filtration and the abrasive conforms to its original size.

4. Requirements for confined blasting

Dry abrasive blasting in a confined enclosure with a forced air exhaust shall be conducted by implementing either of the following:

[Maricopa County Rule 312 §303]

- a. Using a certified abrasive, or
- b. Venting to an ECS.

5. Requirements for ECS and Monitoring Devices:

- a. The following requirements apply to blasting equipment that vents through a required ECS and requires a permit under Rule 200 of the Maricopa County Rules. Buildings or enclosures are not considered control equipment. Equipment that meets the following two criteria and is operated and maintained in accordance with manufacturer's specifications is exempt from the requirements of Section VI.A.5 of this Attachment:

[Maricopa County Rule 312 §304]

- i. Is self-contained and the total internal volume of the blast section is 50 cubic feet or less, and
 - ii. Is vented to an ECS.
- b. Operation and Maintenance (O&M) Plan Required for Emission Control System (ECS):

[Maricopa County Rule 312 §304.1]

 - i. The Permittee shall provide and maintain, ready available at all times, an O&M Plan for any ECS, other emission processing

equipment, and ECS monitoring devices that are used pursuant to Condition VI.A of this Attachment or to an air pollution control permit.

ii. The Permittee shall submit to the Director for approval the O&M Plans of each ECS and each ECS monitoring device that is used pursuant to Condition VI.A of this Attachment.

iii. The Permittee shall comply with all the identified actions and schedules provided in each O&M Plan.

c. Installing and Maintaining ECS Monitoring Devices

The Permittee operating an ECS pursuant to Condition VI of this Attachment shall properly install and maintain in calibration, in good working order and in operation, devices described in the facility's O&M Plan that indicate temperatures, pressures, rates of flow, or other operating conditions necessary to determine if air pollution control equipment is function properly.

[Maricopa County Rule 312 §304.2]

6. Opacity Limitation

The Permittee shall not discharge into the atmosphere from any abrasive blasting operation any air contaminant for an observation period or periods aggregating more than three minutes in any sixty minute period an opacity equal to or greater than 20 percent. An indicated excess will considered to have occurred if any cumulative period of 15-second increments totaling more than three minutes within any sixty minute period was in excess of the opacity standard.

[Maricopa County Rule 312 §305]

7. Wind Event

No dry unconfined abrasive blasting operation shall be conducted during a wind event.

[Maricopa County Rule 312 §306]

8. Traffic Markers

Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting operations shall be performed by wet blasting, hydroblasting, or vacuum blasting. Dry blasting may be performed using only certified abrasives when:

[Maricopa County Rule 312 §307]

a. Removing pavement markings of less than 1,000 square feet;

b. Performing surface preparation for raised traffic delineating markers of less than 1,000 square feet.

9. Work Practices

[Maricopa County Rule 312 §308]

a. Unconfined Blasting

The Permittee shall clean up spent abrasive material with a potential to be

transported during a wind event and, until removal occurs, shall at a minimum, meet the provisions of Maricopa County Rule 310.

b. Confined Blasting

At the end of the work shift the Permittee shall clean up spillage, carry-out or trackout of any spent abrasive material with a potential to be transported during a wind event.

10. Monitoring, Recordkeeping and Reporting

At a minimum, the Permittee subject to Condition VI.A of this Attachment shall keep the following records on-site that are applicable to all abrasive blasting operations. Additional reporting requirements are listed in Condition VIII.A.2 of Attachment "B".

[Maricopa County Rule 312 §501]

a. If blasting operations occur daily or are a part of a facility's primary work activity, then the following shall be kept as a record:

[Maricopa County Rule 312 §501.1]

- i. A list of the blasting equipment,
- ii. The description of the type of blasting as confined, unconfined, sand, wet, or other,
- iii. The locations of the blasting equipment or specify if the equipment is portable,
- iv. A description of the ECS associated with the blasting operations,
- v. The days of the week blasting occurs, and
- vi. The normal hours of operation.

b. If blasting operations occur periodically, then the following shall be kept as a record:

[Maricopa County Rule 312 §501.2]

- i. The date the blasting occurs,
- ii. The blasting equipment that is operating,
- iii. A description of the type of blasting, and
- iv. A description of the ECS associated with the blasting operations.

c. The type and amount of solid abrasive material consumed on a monthly basis. Include name of certified abrasive used, as applicable.

[Maricopa County Rule 312 §501.3]

d. Material Safety Data Sheets (MSDS) or results of any lead testing that was performed on paint that is to be removed via unconfined blasting, as applicable.

[Maricopa County Rule 312 §501.4]

11. Records Retention

Copies of reports, logs, and supporting documentation required by Condition VI.A of this Attachment shall be retained for at least 5 years at permitted Title V sources and for at least 2 years at Non-Title V sources.

[Maricopa County Rule 312 §502]

12. Compliance Determination

a. Control Device Efficiency—Manufacturer’s specifications, testing results, or engineering data that demonstrate control efficiency shall be submitted upon request of the Director.

[Maricopa County Rule 312 §503.1]

b. Paint Lead Level—Prior to unconfined blasting of paint, the Permittee shall be the generator with firsthand knowledge of lead content in the paint, or retain evidence of the lead level from the material MSDS or from a lead test performed in accordance with Maricopa County Rule 312 §506. Unconfined blasting is prohibited if the lead content of the material is greater than 0.1 percent.

[Maricopa County Rule 312 §503.2]

13. Opacity Observations

Opacity shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 and with the following provisions:

[Maricopa County Rule 312 §505]

a. Emissions from unconfined blasting shall be observed at the densest point of the emission from the closest point of discharge, after a major portion of the spent abrasives has fallen out.

[Maricopa County Rule 312 §505.1]

b. Emissions from unconfined blasting employing multiple nozzles shall be considered a single source unless it can be demonstrated by the Permittee that each nozzle, evaluated separately, meets the emission standards of Condition VI.A of this Attachment.

[Maricopa County Rule 312 §505.2]

c. Emissions from confined blasting shall be observed at the densest point after the air contaminant leaves the enclosure or associated ECS.

[Maricopa County Rule 312 §505.3]

14. Permit Shield

Compliance with the conditions of Section VI.A of this Attachment shall be deemed compliance with Maricopa County Rule 312 §103, Maricopa County Rule 312 §301, Maricopa County Rule 312 §302, Maricopa County Rule 312 §303, Maricopa County Rule 312 §304, Maricopa County Rule 312 §304.1, Maricopa County Rule 312 §304.2, Maricopa County Rule 312 §305, Maricopa County Rule 312 §306, Maricopa County Rule 312 §307, Maricopa County Rule 312 §308, Maricopa County Rule 312 §501, Maricopa County Rule 312 §502, Maricopa County Rule 312 §503.1, Maricopa County Rule 312 §503.2 and Maricopa County Rule 312 §505.

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

B. Spray Coating Operations

To limit the emission of particulate matter to the atmosphere from spray coating operations.
[Maricopa County Rule 315 §101]

1. Controls Required

The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

a. Equipment Operated In Enclosures Located Outside a Building:
[Maricopa County Rule 315 §301.1]

Spray coating equipment shall be operated inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object or objects being coated.

i. Three-Sided Enclosures:

Spray shall be directed in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end or within two feet of the top of the enclosure.

ii. More Complete Enclosures:

For enclosures with three sides and a roof or complete enclosures, spray shall be directed into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end or within two feet of any open top of the enclosure.

b. Equipment Operated With Forced Air Exhaust Vented Directly Outside:
[Maricopa County Rule 315 §301.2]

Any spray booth or enclosure with forced air exhaust must have a filtering system with average overspray removal efficiency of at least 92% by weight for the type of material being sprayed. No gaps, sags or holes shall be present in the filters and all exhaust must be discharged into the atmosphere. Spray Booths or enclosures utilizing a water curtain, waterfall or other means to capture particulates in a liquid medium shall effectively remove at least 92% of the overspray and be operated in a manner consistent with the manufacturer's specifications to achieve such efficiency for the type of material being sprayed.

2. Exemptions [Maricopa County Rule 315 §302]

The controls required in Section VI.B.1 of this Attachment shall not apply if any of the following are applicable:

- a. To the spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating.
- b. To the spray coating of facility equipment or structures which are fixed in a

permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating.

- c. To the spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'W x 25'L x 8'H.
- d. To enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air.
- e. To any coating operations utilizing only hand-held aerosol cans.

3. Permit Shield

Compliance with the conditions of Section VI.B of this Attachment shall be deemed compliance with Maricopa County Rule 315 §101, Maricopa County Rule 315 §301.1, Maricopa County Rule 315 §301.2 and Maricopa County Rule 315 §302.

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

**ATTACHMENT “D”: ADDITIONAL CONDITIONS FOR
OPERATIONS INSIDE PIMA COUNTY**

**Air Quality Control Permit No. 49442
For
CEMEX Construction Materials South, LLC**

I. APPLICABILITY

While operating in Pima County the Permittee shall comply with the Conditions set forth in Attachment “B” and Attachment “D”. Whenever more than one Condition in this Attachment regulating the same emissions applies to any emissions unit, or whenever a Condition in this Attachment and a Condition in Attachment "B" regulating the same emissions applies to any emissions unit, the Condition or combination of Conditions resulting in the lowest emissions rate or lowest concentration of regulated air pollutants released to the atmosphere shall apply, unless otherwise specifically exempted or designated in the applicable permit Conditions.

[A.R.S. §49-402(D)]

II. CONCRETE BATCH PLANTS

A. Emission Limitations

Fugitive emissions from concrete batch plants shall be controlled in accordance with Condition III of this Attachment and Condition V of Attachment “B”.

[P.C.C. 17.16.380]

B. Permit Shield

Compliance with Condition II of this Attachment shall be deemed compliance with P.C.C. 17.16.380.

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

III. FUGITIVE DUST REQUIREMENTS

A. Fugitive Dust Producing Activities

1. The Permittee shall control windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, racing event, and other activities, as applicable.

[P.C.C. 17.16.060.A]

2. Until the area becomes permanently stabilized by paving, landscaping or otherwise, dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant.

[P.C.C. 17.16.060.A.1]

3. The Permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate Condition IV.C of this Attachment. [P.C.C. 17.16.060.A.2]

B. Vacant Lots and Open Spaces

[P.C.C. 17.16.080]

1. The Permittee shall minimize dust emissions from the construction, use, alteration, repair, demolition, clearing, leveling, or excavation of any vacant lot, parking area, housing plot, building site, sales lot, playground, livestock feedlot, or other open area, other than those solely used for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes, by intermittently applying water or other effective dust suppressants to the area, paving, detouring, barring access, or other equivalently effective controls.
2. No vacant lot, housing plot, building site, parking area, sales lot, playground, livestock feedlot, or other open area - other than those used solely for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes - shall be left in such a state after construction, alteration, clearing, leveling, or excavation that naturally induced wind blowing over the area causes visible emissions of airborne dust to diffuse beyond the property lines within which the emissions become airborne. Dust emissions must be permanently suppressed by landscaping, covering with gravel or vegetation, paving, or applying equivalently effective controls.
3. Section III.B of this Attachment shall not apply when wind speeds exceed twenty-five miles per hour (as recorded by the National Weather Service or as estimated by an enforcement officer using the Beaufort Scale of Wind Speed Equivalents) unless control measures have not been taken or were not commensurate with the size or scope of the sources of dust.

C. Roads and Streets

1. Dust emissions from the construction phase of a new road must be minimized by applying the same measures specified in Condition III.A of this Attachment. [P.C.C. 17.16.090.B]
2. No new unpaved private driveway shall be constructed unless the road will not be used by more vehicular traffic than that associated with a one or two family private residence, and the road will not be adjacent to any recreational, institutional, educational, or retail sales facility. [P.C.C. 17.16.090.C]
3. No new unpaved service road or unpaved haul road shall be constructed unless dust will be suppressed after construction by intermittently watering, limiting access, or applying chemical dust suppressants to the road, in such a way that visible dust emissions caused by vehicular traffic on the road do not violate

Section IV.C of this Attachment. [P.C.C. 17.16.090.D]

4. No new road other than a private driveway shall be constructed unless the paving specifications are those defined by, or equivalent to those of, the planning department or highway department of the jurisdictional agency. [P.C.C. 17.16.090.E]

5. The surfacing of roadways with asbestos tailings is prohibited. [P.C.C. 17.16.090.F]

D. Particulate Materials

1. Dust emissions from construction activity shall be effectively controlled by applying adequate amounts of water or other equivalently effective dust controls. [P.C.C. 17.16.100.B]

2. Dust emissions from the transportation of materials shall be effectively controlled by covering stock loads in open-bodied trucks, limiting vehicular speeds, or other equivalently effective controls. [P.C.C. 17.16.100.C]

3. Emissions from a sandblasting or other abrasive blasting operation shall be effectively controlled by applying water to suppress visible emissions (wet blasting), enclosing the operation, or use of other equivalently effective controls. [P.C.C. 17.16.100.D]

E. Permit Shield

Compliance with Section III of this Attachment shall be deemed compliance with P.C.C. 17.16.060, P.C.C. 17.16.080, P.C.C. 17.16.090, and P.C.C. 17.16.100. [A.A.C. R18-2-325]

IV. OTHER SPECIFIC REQUIREMENTS

A. Fuel Requirements [P.C.C. 17.16.010.C]

The Permittee of any portable or stationary equipment, which burns any material, except natural gas, shall keep complete records of the materials used as fuel.

B. Opacity Limitations

1. The Permittee shall not cause or permit the effluent from a single emission point, multiple emission points, or fugitive emissions source to have an average optical density equal to or greater than the opacity limiting standards specified in TABLE 4 at the end of Condition IV.B of this Attachment, or as otherwise specified in this permit, subject to the following provisions: [P.C.C. 17.16.040.A]

a. Opacities (optical densities), as measured in accordance with Method 9,

of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument. [P.C.C. 17.16.040.A.1]

- b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be as specified in TABLE 4. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation. [P.C.C. 17.16.040.A.2]
 - c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited. [P.C.C. 17.16.040.A.3]
 - d. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements of this article, this article shall not apply. [P.C.C. 17.16.040.B]
2. Except for sources located within the boundaries of the Tohono O'Odham, Pasqua-Yaqui, and San Xavier Indian Reservations, opacity of an emission from any non-point source, as measured in accordance with the Arizona Testing Manual, Reference Method 9, shall not exceed the following: [P.C.C. 17.16.050.B]
- a. 20 percent for such non-point sources in Eastern Pima County, east of the eastern boundary of the Tohono O'Odham Reservations.
 - b. 40 percent for such non-point sources in all other areas of Pima County.

TABLE 4: EMISSIONS-DISCHARGE OPACITY LIMITING STANDARDS

Type of Source	Instantaneous Opacity Measurements			Maximum Allowable Average Opacity, %
	Required No. (For a Set)	Excluded No. (Highest Values)	No. to Use For Averaging	
Cold Diesel Engines ¹	25	0	25	60
Loaded Diesel Engines ²	26	1	25	60
Other Sources ³	25	0	25	20

¹ Applicable to the first 10 consecutive minutes after starting up a diesel engine.

² Applicable to a diesel engine being accelerated under load.

³ Any source not otherwise specifically covered within this table.

C. Visibility Limiting Standard

[P.C.C. 17.16.050]

1. The Permittee shall not cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. [P.C.C. 17.16.050.A]
2. Opacity of an emission from any non-point source shall not be greater than 40 percent measured in accordance with the Arizona Testing Manual, Reference Method 9. [P.C.C. 17.16.050.B]
3. Open fires permitted according to Chapter 17.12 of the Pima County Regulations are exempt from the requirements of Section IV.C of this Attachment. [P.C.C. 17.16.050.C]
4. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. [P.C.C. 17.16.050.D]
 - a. Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule 17.12.470 of the Pima County Regulations may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions.
 - b. Condition IV.C of this Attachment shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.
 - c. Condition IV.C of this Attachment shall not apply to the generation of airborne particulate matter from undisturbed land.

D. Permit Shield

Compliance with Condition IV of this Attachment shall be deemed compliance with P.C.C. 17.16.010.C, P.C.C. 17.16.040, and P.C.C. 17.16.050.

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

**ATTACHMENT "E": ADDITIONAL CONDITIONS FOR
OPERATIONS INSIDE PINAL COUNTY**

**Air Quality Control Permit No. 49442
For
CEMEX Construction Materials South, LLC**

I. APPLICABILITY

While operation in Pinal County the Permittee shall comply with the Conditions set forth in Attachment "B" and Attachment "E". Whenever more than one Condition in this Attachment regulating the same emissions applies to any emissions unit, or whenever a Condition in this Attachment and a Condition in Attachment "B" regulating the same emissions applies to any emissions unit, the Condition or combination of Conditions resulting in the lowest emissions rate or lowest concentration of regulated air pollutants released to the atmosphere shall apply, unless otherwise specifically exempted or designated in the applicable permit Conditions.

[A.R.S. § 49-402(D)]

II. FUGITIVE EMISSIONS REQUIREMENTS

Particulate Matter Emissions

A. Emission Limitations/Standards

1. The Permittee shall not cause, suffer, allow, or permit a building or its appurtenances, subdivision site, driveway, parking area, vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne. [Pinal County Code 4-2-040.A]
2. The Permittee shall not disturb or remove soil or natural cover from any area without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne. [Pinal County Code 4-2-040.D]

B. Monitoring and Record Keeping Requirements

[Pinal County Code 4-2-050]

1. Opacity observations shall not be made or additional preventive measures required when the wind speed instantaneously exceeds 25 mph or when the average wind speed is greater than 15 mph.
2. The average wind speed determination shall be on a 60 minute average from the nearest Air Quality Control District monitoring station or by a wind instrument located at the site being checked.

C. Permit Shield

Compliance with the conditions of Section II of this Attachment and the Conditions of Attachment “B” shall be deemed compliance with Pinal County Code 4-2-040 and 4-2-050.

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

ATTACHMENT "F": EQUIPMENT LIST

**Air Quality Control Permit No. 49442
For
CEMEX Construction Materials South, LLC**

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.	EQUIPMENT ID NUMBER
Batch Plant	240 yd ³ /hr	CON-E-CO	12 YD LO PRO	D0673	2008	34-35722
Flyash Silo	215 Barrels	CON-E-CO	N/A	N/A	2008	N/A
Flyash Silo/Baghouse	1520 CFM	CON-E-CO	AQMD0005	N/A	2008	N/A
Cement Silo	565 Barrels	CON-E-CO	N/A	D0673	2008	34-35722
Cement Silo/Baghouse	1520 CFM	CON-E-CO	AQMD0005	N/A	2008	N/A
Loadout Dust Collector	5880 CFM	CON-E-CO	PJ-980D	D0673	2008	34-35722
Generator	350 KW	Caterpillar	3406	4ZR05388	7/23/1999	22-6008
Radial Stacker	N/A	Helmick	30"x65'	9-30-7299-AA	N/A	34-35722
Radial Stacker	N/A	Helmick	24"x67'	9-24-7390-AA	N/A	29-1491
Diesel Water Heater	1.4 MMBtu/hr	Powerflame	12CA	149045	N/A	N/A