

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
1110 West Washington Street • Phoenix, AZ 85007 • Phone: (602) 771-2338

GENERAL AIR QUALITY CONTROL PERMIT for Concrete Batch Plants

(As required by Title 49, Chapter 3, Article 2, Section 49-426, Arizona Revised Statutes)

This air quality control permit does not relieve applicant of responsibility for meeting all air pollution regulations



THIS GENERAL PERMIT ISSUED SUBJECT TO THE FOLLOWING Conditions contained in Attachments "A" through "E"

ADEQ GENERAL PERMIT NUMBER 104 PERMIT CLASS II EXPIRATION DATE: _____

PERMIT ISSUED THIS _____ DAY OF _____

SIGNATURE

TITLE

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**AIR QUALITY CONTROL GENERAL PERMIT
 FOR CONCRETE BATCH PLANTS**

I. INTRODUCTION

- A. This document is a General Permit for portable and stationary Concrete Batch Plants, authorized under Arizona Administrative Code (A.A.C.) R18-2-501 through 511 and Arizona Revised Statutes (A.R.S.) §49-426. Owners/operators of existing and new concrete batch plants may obtain coverage under this general permit in lieu of an individual permit. Such parties shall do so by obtaining a General Permit for Concrete Batch Plants which will include an Authorization to Operate (ATO) for significant pieces of equipment.
- B. This general permit covers concrete batch plants that are subject to state or county regulations.
- C. Eligibility

Facilities which can comply with the following limitations are eligible for this General Permit:

Scenario	Maximum Cumulative Production Rate (Cubic Yards per Day)
Facilities that have the equipment type, Truck Mix Plants with no Baghouse controlling emissions from the product loading point.	500
Facilities that do not have the equipment type, Truck Mix Plants with no Baghouse controlling emissions from the product loading point.	2,000

- D. This General Permit does not apply to sources that require a Class I permit.
- E. References to the “Director” in this General Permit mean the Director of the Air Quality Division of the Arizona Department of Environmental Quality (ADEQ). References to the “Department” mean ADEQ. For sources required to obtain a Permit from the Maricopa, Pima or Pinal County, references in this document to the “Department” mean the Air Quality Control agency for the respective county and references to the “Director” mean the Control Officer of the respective agency except as otherwise indicated.
- F. This General Permit applies to sources operating in all counties of Arizona.

II. ATTACHMENT APPLICABILITY

- A. Attachments “A”, “B” are applicable to all facilities covered under this General Permit.

- B.** If the facility is located in Maricopa, Pima, or Pinal County, Attachments “C”, “D”, or “E” respectively are also applicable in addition to the above attachments.

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Table of Contents

I. INTRODUCTION	3
II. ATTACHMENT APPLICABILITY	3
ATTACHMENT “A”: GENERAL PROVISIONS.....	7
I. PERMIT EXPIRATION AND RENEWAL.....	7
II. COMPLIANCE WITH PERMIT CONDITIONS	7
III. GENERAL PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE	7
IV. POSTING OF PERMIT	8
V. FEE PAYMENT	9
VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE	9
VII. COMPLIANCE CERTIFICATION	9
VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS	10
IX. INSPECTION AND ENTRY	10
X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD.....	10
XI. ACCIDENTAL RELEASE PROGRAM.....	10
XII. EXCESS EMISSIONS AND PERMIT DEVIATIONS	11
XIII. RECORDKEEPING REQUIREMENTS	12
XIV. REPORTING REQUIREMENTS	13
XV. DUTY TO PROVIDE INFORMATION.....	13
XVI. CHANGES TO FACILITIES GRANTED COVERAGE UNDER GENERAL PERMITS	13
XVII. TESTING REQUIREMENTS	14
XVIII. PROPERTY RIGHTS.....	17
XIX. SEVERABILITY CLAUSE	17
XX. PERMIT SHIELD.....	17
XXI. PROTECTION OF STRATOSPHERIC OZONE	17
XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS	17
XXIII. CONDITIONS SPECIFIC TO PORTABLE SOURCES	17
ATTACHMENT “B”: SPECIFIC CONDITIONS	19
I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN FOR NEW OR MODIFIED SOURCES	19
II. CONDITIONS FOR COVERAGE.....	19
III. FACILITY-WIDE REQUIREMENTS.....	19
IV. CONCRETE BATCH PLANT REQUIREMENTS	23
V. WASH PLANT REQUIREMENTS	26
VI. BOILER REQUIREMENTS	26
VII. INTERNAL COMBUSTION ENGINES NOT SUBJECT TO NSPS REQUIREMENTS	32
VIII. INTERNAL COMBUSTION COMPRESSION IGNITION ENGINES SUBJECT TO NSPS SUBPART III.....	58
IX. INTERNAL COMBUSTION SPARK IGNITION ENGINES SUBJECT TO NSPS SUBPART III	79
X. UNCLASSIFIED SOURCES	92
XI. FUGITIVE DUST REQUIREMENTS.....	95
XII. OTHER PERIODIC ACTIVITIES.....	97
ATTACHMENT “C”: ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE MARICOPA COUNTY	102

I. APPLICABILITY.....	102
II. FACILITY WIDE REQUIREMENTS	102
III. CONCRETE BATCH PLANT REQUIREMENTS	106
IV. INTERNAL COMBUSTION ENGINES	108
V. FUGITIVE DUST REQUIREMENTS.....	114
VI. OTHER PERIODIC ACTIVITY REQUIREMENTS	134
ATTACHMENT “D”: ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE PIMA COUNTY	
141	
I. APPLICABILITY.....	141
II. FACILITY WIDE REQUIREMENTS	141
III. CONCRETE BATCH PLANT REQUIREMENTS	144
IV. FUGITIVE DUST REQUIREMENTS.....	144
ATTACHMENT “E”: ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE PINAL COUNTY	
148	
I. APPLICABILITY.....	148
II. FACILITY WIDE REQUIREMENTS	148
III. FUGITIVE EMISSIONS REQUIREMENTS	149
APPENDIX “A”: WEST PINAL COUNTY PM₁₀ NONATTAINMENT AREA	
155	
APPENDIX “B”: OPACITY SURVEY RECORDKEEPING FORM	
156	

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ATTACHMENT "A": GENERAL PROVISIONS

I. PERMIT EXPIRATION AND RENEWAL

[A.R.S. § 49-426.F, A.A.C.R18-2-306.A.1, -505]

- A.** This General Permit is valid for a period of five (5) years from the date of issuance. The Director shall review and may renew this General Permit every five years from its date of issuance. All Permittee's Authorizations to Operate (ATOs) shall coincide with the term of this General Permit, regardless of when the individual authorization began during this five year period, except that the Director may require a Permittee authorized to operate under this General Permit to apply for and obtain an individual permit at any time, if the source is not in compliance with the terms and conditions of this General Permit.
- B.** At the time that the public notice is required, pursuant to issuance of the proposed General Permit renewal, the Director shall notify in writing all Permittees who have been granted, or who have applications pending for, ATO(s) under this General Permit. The written notice shall describe the source's duty to reapply and may include requests for information required under the proposed General Permit.

II. COMPLIANCE WITH PERMIT CONDITIONS

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

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

- 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.

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

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

- A.** The Director may reopen and reissue, or terminate this General Permit at any time if:
- 1.** The Director has determined that the emissions from the sources in the facility class cause or contribute to ambient air quality standards violations which are not adequately addressed by the requirements in this General Permit, or

[A.A.C. R18-2-510.A.1]

- 2.** The Director has determined that the terms and conditions of this General Permit no longer meet the requirements of A.R.S. §49-426 and 427.

[A.A.C. R18-2-510.A.2]

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

[A.A.C. R18-2-321.A.1.c]

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

[A.A.C. R18-2-321.A.1.d]

B. The Director shall provide written notice to all sources operating under this General Permit prior to reissuance or termination of this General Permit. Such notice shall include an explanation of the basis for the proposed action. Within 180 days of receipt of the notice of the expiration, termination or cancellation of this General Permit, sources notified shall submit an application to the Director for the appropriate permit.

[A.A.C. R18-2-510.B]

C. The Director may require a source authorized to operate under this General Permit to apply for and obtain an individual source permit at any time if:

1. The source is not in compliance with the terms and conditions of this General Permit;

2. The Director has determined that the emissions from the source or facility class are significant contributors to ambient air quality standard violations which are not adequately addressed by the requirements in this General Permit.

3. The Director has information which indicates that the effects on human health and the environment from the sources covered under this General Permit are unacceptable;

4. The Director has reasonable cause to believe that the ATO was obtained by fraud or misrepresentation; or

5. The person applying for an ATO failed to disclose a material fact required by the permit application or the regulations applicable to the ATO of which the applicant had or should have had knowledge at the time the application was submitted.

[A.A.C. R18-2-510.C]

D. If the Director revokes a source's authority to operate under this General Permit, the Director shall notify the Permittee by certified mail, return receipt requested. The notice shall include a statement detailing the grounds for the revocation of authority and a statement that the Permittee is entitled to a hearing. A source previously authorized to operate under this General Permit may operate under the terms of this General Permit until the earlier of the date it submits a complete application for an individual permit, at which time it may operate under that application, or 180 days after receipt of the notice of revocation of authority to operate under this General Permit.

[A.A.C. R18-2-510.D]

IV. POSTING OF PERMIT

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

A. The Permittee shall post this General Permit or a certificate of General Permit coverage at the location where the equipment is installed in such a manner as to be clearly visible and accessible.

- B. All equipment covered by this General Permit shall be clearly marked with a serial number or other equipment number that is listed on the ATO for that piece of equipment.
- C. A copy of the complete General Permit and associated ATOs shall be kept on the site.

V. FEE PAYMENT

The Permittee shall pay fees to the Director pursuant to A.R.S. §49-426(E) and A.A.C. R18-2-511.

[A.A.C. R18-2-511]

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety (90) days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.

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

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.B.

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

VII. COMPLIANCE CERTIFICATION

A. The Permittee shall submit to the Director a compliance certification at least once each year and upon request of the Director. The compliance certification shall describe the compliance status of the source. A compliance certification submitted by the Permittee of a stationary source covered by a general permit shall be on a form provided by the Director and shall include the following information:

[A.A.C. R18-2-514.A]

1. The source's name, mailing address, contact person and contact person phone number, permit number, compliance reporting period, and physical address and location, if different than the mailing address.
2. A certification of truth, accuracy, and completeness signed by the facility's responsible officer.
3. Process information for the source, including design capacity, operations schedule, hours of operation, and total production.
4. Method of documenting compliance and the status of compliance with all recordkeeping, reporting, monitoring, and testing requirements and all emission limitations and standards imposed in the permit.

B. The Permittee shall complete and submit all compliance certifications through the ADEQ web portal (myDEQ).

[A.A.C. R18-2-514.B]

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

[A.A.C. R18-2-309.5.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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.

[A.A.C. R18-2-309.3]

IX. INSPECTION AND ENTRY

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;
[A.A.C. R18-2-309.4.a]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
[A.A.C. R18-2-309.4.b]
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
[A.A.C. R18-2-309.4.c]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
[A.A.C. R18-2-309.4.d]
- E. Record any inspection by use of written, electronic, magnetic and photographic media.
[A.A.C. R18-2-309.4.e]

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If a source which has been granted coverage under this permit 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, reapply for coverage under the General Permit demonstrating how the source will comply with the standard.

[A.A.C. R18-2-304.D.3]

XI. ACCIDENTAL RELEASE PROGRAM

If a source which has been granted coverage under this General Permit 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.

[40 CFR Part 68]

XII. EXCESS EMISSIONS AND PERMIT DEVIATIONS

A. Excess Emissions Reporting

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

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

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

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

b. The report shall contain the following information:

(1) Identity of each stack or other emission point where the excess emissions occurred;
[A.A.C. R18-2-310.01.B.1]

(2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
[A.A.C. R18-2-310.01.B.2]

(3) Time and duration, or expected duration, of the excess emissions;
[A.A.C. R18-2-310.01.B.3]

(4) Identity of the equipment from which the excess emissions emanated;
[A.A.C. R18-2-310.01.B.4]

(5) Nature and cause of the emissions;
[A.A.C. R18-2-310.01.B.5]

(6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;
[A.A.C. R18-2-310.01.B.6]

(7) Steps that were or are being taken to limit the excess emissions; and
[A.A.C. R18-2-310.01.B.7]

(8) 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 governing source operation during periods of startup or malfunction..
[A.A.C. R18-2-310.01.B.8]

2. In the case of continuous or recurring excess emissions, the notification requirements 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

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. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XII.A above is prompt for deviations that constitute excess emissions;
2. Notice that is submitted within two working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition 0 of Attachment "B";
3. Except as provided in Conditions XII.B.1 and 2, prompt notification of all other types of deviations shall be annually, concurrent with the annual compliance certifications required in Section VII, and can be submitted the "Annual/Semiannual Deviation Monitoring Report" form available on the Arizona Department of Environmental Quality Website.

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

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

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

XIII. RECORDKEEPING REQUIREMENTS

- 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) any 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 analyses; and

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

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

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

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

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

6. The operating conditions as existing at the time of sampling or measurement.
[A.A.C. R18-2-306.A.4.a.vi]

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least five (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.
[A.A.C. R18-2-306.A.4.b]

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. The Permittee shall submit the following reports:

1. Compliance certifications in accordance with Section VII above.
[A.A.C. R18-2-306.A.5.a]

2. Excess emission; permit deviation, and emergency reports in accordance with Section XII above.
[A.A.C. R18-2-306.A.5.b]

3. Other reports required by any conditions of other Attachments.

XV. DUTY TO PROVIDE INFORMATION

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

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

XVI. CHANGES TO FACILITIES GRANTED COVERAGE UNDER GENERAL PERMITS

A. Facility Changes that Require New Authorization to Operate.

The following changes at a source that has been granted coverage under a general permit shall be made only after the source requests new authorization to operate from the Director:
[A.A.C. R18-2-512.B]

a. Adding new emissions units that require new authorization to operate,

b. Installing replacement emissions units that require authorization to operate.

B. Facility Changes that Do Not Require Authorization to Operate.

The following changes at a source that has been granted coverage under a general permit shall be made only after the source provides written notification to the Department:

[A.A.C. R18-2-512.C]

- a. Adding new emissions units that do not require authorization to operate,
- b. Installing a replacement emissions unit with a higher capacity that does not require authorization to operate,
- c. Adding or replacing air pollution control equipment.

C. A source that has been granted coverage under a general permit shall keep a record of any physical change or change in the method of operation that could affect emissions. The record shall include a description of the change and the date the change occurred.

[A.A.C. R18-2-512.D]

D. For sources that submit a request or notification under Conditions XIV.A and B, the applicant shall provide information identifying and describing the source, its processes, and operating conditions in sufficient detail to allow the Director to determine continued qualification for, and to assure compliance with, the general permit. The Director shall act on a request for new authority to operate under a general permit as expeditiously as possible. The source may operate under the terms of the applicable general permit during that time.

[A.A.C. R18-2-512.E]

XVII. TESTING REQUIREMENTS

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

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

B. Operational Conditions during Performance Testing

Performance tests shall be conducted under such conditions as the Director shall specify to the plant operator based on representative performance of the source. The Permittee shall make available to the Director such records as may be necessary to determine the conditions of the performance tests. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative conditions of performance tests unless otherwise specified in the applicable standard.

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

Performance 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.

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

C. Test Plan

At least 14 working days prior to performing a test, the Permittee shall submit a test plan to the Director, which must include the following, in addition to all other applicable requirements, as identified in the Arizona Testing Manual:

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

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

D. Stack Sampling Facilities

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

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

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.

E. 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.

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-312.F]

F. Report of Final Test Results

A written report of the results of performance tests conducted pursuant to 40 CFR 63, shall be submitted to the Director within 60 days after the test is performed. A written report of the results of all other performance tests shall be submitted within 4 weeks after the test is performed, or as otherwise provided in the Arizona Testing Manual. All performance testing reports shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

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

G. Extension of Performance Test Deadline

For performance testing required under Condition XVII.A above, the Permittee may request an extension to a performance test deadline due to a force majeure event as follows:

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

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

[A.A.C. R18-2-312.J.1]

2. The Permittee shall provide to the Director a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the Permittee proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure event occurs.

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

3. The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Director. The Director shall notify the Permittee in writing of approval or disapproval of the request for an extension as soon as practicable.

[A.A.C. R18-2-312.J.3]

4. Until an extension of the performance test deadline has been approved by the Director under Conditions XVII.G.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XVI.

[A.A.C. R18-2-312.J.4]

5. For purposes of this Section XVI, a “force majeure event” means an event that will be or has been caused by circumstances beyond the control of the Permittee, its contractors, or any entity controlled by the Permittee that prevents it from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the Permittee's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the Permittee.

[A.A.C. R18-2-312.J.5]

XVIII. PROPERTY RIGHTS

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

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

XIX. SEVERABILITY CLAUSE

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

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

XX. PERMIT SHIELD

As of the date an ATO for a source is granted, compliance with the conditions of this General 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 facility changes without a permit revision pursuant to Condition **Error! Reference source not found.** of this Attachment.

[A.A.C. R18-2-317.F, - 320, and -325]

XXI. PROTECTION OF STRATOSPHERIC OZONE

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

[40 CFR Part 82]

XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

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

[40 CFR Part 60 Subpart A and Part 63 Subpart A]

XXIII. CONDITIONS SPECIFIC TO PORTABLE SOURCES

- A.** This Section applies to sources that have been granted coverage under a general permit that allows for the operation of a source at more than one location.

[A.A.C. R18-2-513.A]
- B.** The Permittee that hold multiple coverages under the same general permit shall have separate coverage under the general permit for each location at which each portable source operates.

[A.A.C. R18-2-513.C.1]
- C.** The Permittee shall use the myDEQ web portal to obtain authorizations to operate for each location at which the equipment will operate.

[A.A.C. R18-2-513.C.3]
- D.** 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. A portable source that has been granted coverage under a general permit that

subsequently obtains a county permit shall request that the Director terminate the coverage under the general permit. Upon issuance of the county permit, the coverage under the general permit issued by the Director is no longer valid.

[A.A.C. R18-2-513.D]

- E.** A portable source which has a county permit but proposes to operate outside that county may obtain coverage under a general permit from the Director. A portable source that has a permit issued by a county and obtains coverage under a general permit issued by the Director shall request that the county terminate the permit. Upon issuance of coverage under a general permit by the Director, the county permit is no longer valid. Before commencing operation in the new county, the source shall notify the Director and the control officer who has jurisdiction in the county that includes the new location according to Condition XXI.F.

[A.A.C. R18-2-513.E]

- F.** A portable source granted coverage under a general permit may be transferred from one location to another provided that the Permittee notifies the Director and any control officer who has jurisdiction over the geographic area that includes the new location of the transfer prior to the transfer. The notification shall include:

[A.A.C. R18-2-513.F]

1. A description of the equipment to be transferred including the permit number and as appropriate the Authorization-to-Operate number for each piece of equipment;
2. A description of the present location;
3. A description of the new location;
4. The date on which the equipment is to be moved;
5. The date on which operation of the equipment will begin at the new location;
6. A complete list of all equipment requiring authorization to operate that may be located at the new location; and
7. Revised emissions calculations demonstrating that the equipment at the new location continues to qualify for the general permit under which the portable source has coverage.

ATTACHMENT "B": SPECIFIC CONDITIONS

I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN FOR NEW OR MODIFIED SOURCES

[ARS §49-404.c and -426]

This permit is issued pursuant to the provisions of the Arizona Revised Statutes (ARS) and constitutes an Installation Permit for the purpose of the applicable State Implementation Plan.

II. CONDITIONS FOR COVERAGE

A. This General Permit covers sources which meet the requirements as specified in the general permit application for Concrete Batch Plants.

B. The Permittee shall conduct all permitting transactions, including move notices, electronically through the myDEQ online portal.

[A.A.C. R18-2-513.E]

III. FACILITY-WIDE REQUIREMENTS

A. Operating Limitations

1. If the ATO has at least one of the equipment type, truck mix without a baghouse at the loading point, the Permittee shall not operate the concrete batch plants such that the cumulative throughput exceeds 500 cubic yards per day for all concrete batch plants covered by this general permit.

[A.A.C. R18-2-306.01]

2. If the ATO does not have any of the equipment type, truck mix without a baghouse at the loading point, the Permittee shall not operate the concrete batch plants such that the cumulative throughput exceeds 2,000 cubic yards per day for all concrete batch plants.

[A.A.C. R18-2-306.01]

3. *The Permittee shall not operate the equipment identified in the ATO for more than the number of annual hours limit specified in the ATO.*

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

[Material permit conditions are indicated by underline and italics]

B. Opacity

1. Instantaneous Surveys and Six-Minute Observations

a. Instantaneous Surveys

Any instantaneous survey required by this permit shall be determined by either option listed in Conditions III.B.1.a(1) and a(2):

[A.A.C. R18-2-311.b]

(1) Alternative Method ALT-082 (Digital Camera Operating Technique)

(a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

(b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.

(2) EPA Reference Method 9 Certified Observer.

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

b. Six-Minute Observations

Any six-minute observation required by this permit shall be determined by either option listed in Conditions III.B.1.b(1) and (2):

[A.A.C. R18-2-311.b]

(1) Alternative Method ALT-082 (Digital Camera Operating Technique)

(a) The Permittee, or Permittee representative, shall be certified in the use of Alternative Method ALT-082.

(b) The results of all instantaneous surveys and six-minute observations shall be obtained within 30 minutes.

(2) EPA Reference Method 9.

c. Within 30 days of first obtaining coverage under this general permit, the Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all 6-minute Method 9 observations required by this permit are conducted as a 6-minute Alternative Method-082 (Digital Camera Operating Technique) and all instantaneous visual surveys required by this permit are conducted as an instantaneous Alt-082 camera survey. Any 6-minute Method 9 observation required by this permit can be conducted as a 6-minute Alternative Method-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous Alt-082 camera survey.

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

2. Monitoring, Recordkeeping, and Reporting Requirements

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

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
 - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.
 - (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
 - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
 - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
 - (c) Report the event as an excess emission for opacity in accordance with Condition XII.A of Attachment "A".
 - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

C. Additional Operational Limitations

1. The Permittee shall not hold an ADEQ air quality permit and a county air quality permit concurrently for the concrete batch facility. If a county air quality permit is required to be obtained in accordance with Condition **Error! Reference source not found.** of this Attachment, the Permittee shall terminate this ADEQ permit after obtaining a county air quality permit.

[A.A.C. R18-2-324]
2. The Permittee shall operate and maintain all emission related equipment associated with this General Permit in accordance with manufacturer's specifications. If manufacturer specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of each piece of equipment. A copy of the manufacturer specifications or the operation and

maintenance plan shall be kept on-site and made available to ADEQ or the respective air quality control agency upon request.

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

3. *The Permittee shall limit the operation of the equipment at the facility to the hours specified in the ATO.*

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

[Material permit conditions are indicated by underline and italics]

D. Record Keeping Requirements

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

1. The Permittee shall maintain records of the total daily production of material processed by the equipment covered under this General Permit.
2. The Permittee shall keep on-site records of maintenance performed on all emission related equipment.
3. The Permittee shall maintain on-site, records of the manufacturer's specifications for all concrete batch plant equipment utilized at the facility.
4. The Permittee shall maintain daily, monthly, and rolling twelve-month totals of the hours of operation of all the equipment at the facility.
5. The Permittee shall retain all records, analyses, and reports shall for a minimum of five years from the date of generation. The most recent two years of data shall be kept on-site.

E. Reporting Requirements

Deviations from the following Attachment "B" permit conditions shall be promptly reported in accordance with Condition XII.B.2 of Attachment "A":

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

- a. Condition III.A of Attachment "B"
- b. Condition **Error! Reference source not found.** of Attachment "B"
- c. Condition IV.C.1.a of Attachment "B"
- d. Condition IV.C.2.a of Attachment "B"
- e. Condition IV.C.2.b of Attachment "B"
- f. Condition V.A of Attachment "B"

F. Nothing in this permit shall alter or affect the following:

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

1. The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the EPA Administrator under that Section;

2. The liability of the facility for any violation of applicable requirements prior to or at the time of permit issuance;
3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act;
4. The ability of the EPA Administrator or the Director to obtain information from the facility pursuant to Section 114 of the Act, or any provision of state law; and
5. The authority of the Director to require compliance with new applicable requirements adopted after the permit is issued.

IV. CONCRETE BATCH PLANT REQUIREMENTS

A. Applicability

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

B. Opacity

1. Emission Limitations and Standards

- a. 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]

- b. 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]

- c. Operating Requirements

The Permittee shall control fugitive dust emitted from the concrete batch plant in accordance with Section XI of Attachment "B".

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

C. Air Pollution Control Requirements

The Permittee shall install, operate, and maintain the following air pollution controls on the following emission sources:

1. Cement and Fly Ash Silos

- a. The Permittee shall operate baghouses, or equivalent, in accordance with vendor specifications, to control emissions vented by cement/fly ash storage silos during the loading of cement or fly ash. 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 upon request.

[A.A.C. R18-2-306.A.2 and -331.A.3.e]

[Material permit conditions are indicated by underline and italics]

- b. *The Permittee shall load cement or fly ash storage silos in such a manner that the displaced air does not bypass the baghouse and does not directly vent to the atmosphere.*

[A.A.C. R18-2-306.A.2 and -331A.3.e]

[Material permit conditions are indicated by underline and italics]

- c. The Permittee shall maintain baghouses in accordance with the following:

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

- (1) Prior to start-up, visual inspections shall be conducted on all venting ducts or lines, fittings (including dust shroud), and the blower;
- (2) Following shut-down, all pressurized systems shall be turned “off”;
- (3) All pressure and temperature gauges, flow meters, and other related instruments shall be checked daily to ensure proper functioning; any detected problems shall be corrected as soon as possible;
- (4) All ducts, hoods, framework, and housings shall be checked daily for signs of wear;
- (5) The fan motor, bearings, shaking device, reverse-jet blow rings, valves, and dampers shall be lubricated regularly and checked for wear; and
- (6) The Permittee shall maintain records which demonstrate compliance with the activities listed in Conditions IV.C.1.c(1) through (5) above.

2. Product Delivery System

- a. *For equipment listed on the ATO that indicate operating with a baghouse on the product delivery system, the Permittee shall install and maintain a baghouse on the product delivery system to minimize visible emissions during material transfer to trucks.*

[A.A.C.R18-2-306.A.2 and -331.A.3.e]

[Material Permit Conditions are indicated by underline and italics]

- b. *For all facilities, the Permittee shall install and maintain a rubber sleeve, baghouse, or equivalent on the product delivery system to minimize visible emissions during material transfer to trucks.*

[A.A.C.R18-2-306.A.2 and -331.A.3.e]

[Material Permit Conditions are indicated by underline and italics]

- c. The permittee shall operate and maintain the rubber sleeve, baghouse, or equivalent, in accordance with the vendor specifications. If vendor specifications are not available, the Permittee shall develop and implement procedures for the proper use (or operation) and maintenance of the rubber sleeve or equivalent. A copy of the vendor specifications or the operation and maintenance plan shall be kept on-site and made available upon request.

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

3. Wet Suppression Systems

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

- a. The Permittee shall operate and maintain water sprays in accordance with the following:
- (1) Prior to start-up, the water supply shall be checked, all nozzles shall be inspected, and all associated valves shall be opened;
 - (2) Following shut-down, all nozzles shall be inspected and all associated valves shall be closed;
 - (3) The spray system shall be checked daily for performance; and
 - (4) All nozzles and valves shall be cleaned or replaced as needed.
- b. The Permittee shall operate and maintain water trucks, or the equivalent, in accordance with the following:
- (1) Prior to start-up, the water supply shall be checked, all nozzles shall be inspected, and all associated valves shall be opened;
 - (2) Following shut-down, all nozzles shall be inspected and all associated valves shall be closed;
 - (3) Safety and equipment checks shall be conducted daily; and
 - (4) Normal vehicle maintenance shall be performed on a regular or “as needed” basis.
- c. The Permittee shall maintain records which demonstrate compliance with the activities listed in Conditions IV.C.3.a and b above.

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

D. Monitoring, Maintenance and Recordkeeping

1. The Permittee shall conduct monthly opacity monitoring for all emission units as per Condition III.B.
2. 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.3.c]
3. For each baghouse equipped with a pressure drop measuring device, the Permittee shall monitor and record twice per shift the pressure drop (in inches of H₂O) across the baghouse. The records shall include the dates and time each reading was taken.
[A.A.C. R18-2-306.A.3.c and -331.A.3.b]

E. Permit Shield

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

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-614, -702.B.3, and -723.

V. WASH PLANT REQUIREMENTS

- A. The Permittee shall maintain and operate venturi scrubbers, or spray bars, or equivalent control equipment to control visible emissions from screening, handling, transporting or conveying of materials, or other operations likely to result in significant amounts of airborne dust.

[A.A.C. R18-2-306.A.2, -306.A.4, and -331.A.3.e]
[Material permit conditions are indicated by underline and italics]

- B. The Permittee shall utilize spray bar pollution control in accordance with "EPA Control of Air Emissions From Process Operations in the Rock Crushing Industry" (EPA 340/1-79-002), and "Wet Suppression System" (pages 15-34, amended as of January, 1979 [and no future amendments or editions]), as incorporated herein by reference and on file with the Office of the Secretary of State, with placement of spray bars and nozzles as required by the Director to minimize air pollution.

[A.A.C. R18-2-722.D]

- C. The Permittee shall maintain a log of any maintenance activities performed on the spray bars. The log shall include the date, time, type and duration of maintenance activities performed.

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

- D. Permit Shield

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

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-722.D.

VI. BOILER REQUIREMENTS

- A. Applicability

Section VI applies to all boilers with an ATO under this General Permit.

- B. Operating Limitation

The Permittee shall not operate any boiler with a maximum firing capacity greater than 10 MMBtu per hour.

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

- C. Fuel Limitation

1. The Permittee shall only burn natural gas, liquefied petroleum gas (Butane or Propane), on specification used oil, or diesel fuel in the boiler(s), as identified on the ATO(s).

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

2. If the Permittee is authorized to combust "on specification" used oil fuel in the ATO, it shall be used only under the following conditions:

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

- a. The used oil fuel must be analyzed and certified by the marketer (oil supplier) to be "on specification" according to the definition in A.R.S. §49-801;
- b. The flash point shall be at least 100°F; and
- c. The contaminants must not exceed the following levels (in parts per million by weight) listed in Table 1.

Table 1: Maximum Contaminate Levels for Used Oil Combustion

Pollutant	Level
Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
PCBs	2 ppm
Halogens	1000 ppm

3. The Permittee shall maintain copies of the fuel analysis supplied by the marketer for each batch of on specification used oil, and shall confirm that the contaminant levels specified in Condition VI.C.2.c above are not exceeded.

D. Particulate Matter

1. Emission Limitation

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

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

where:

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

Q = the heat input in million Btu per hour.

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

2. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-724.C.1.

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

E. Opacity Standards

1. Emission Limitations and Standards

The Permittee shall not cause, allow or permit the opacity of any plume or effluent

from any boiler to exceed 15 percent.

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

2. Monitoring, Recordkeeping and Reporting Requirements

a. The Permittee shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent.

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

b. The Permittee shall conduct monthly opacity monitoring for all emission units as per Condition III.B.

3. Permit Shield

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

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

F. Sulfur Dioxide

1. Emissions Limitation

While burning low-sulfur oil, the Permittee shall not cause, allow, or permit emissions of more than 1.0 pounds of sulfur dioxide per million Btu heat input. The Permittee is prohibited from the use of high sulfur oil (fuel containing 0.90 percent or more by weight of sulfur).

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

2. Monitoring, Reporting and Record Keeping

The Permittee shall keep records of fuel supplier certifications or other appropriate documentation to demonstrate compliance with the sulfur content limit specified in the Condition VI.F.1 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 ADEQ upon request.

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

3. Permit Shield

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

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

G. Hazardous Air Pollutants

1. Applicability

a. The requirements of this part are applicable to oil-fired boilers that are identified as applicable to NESHAP Subpart JJJJJ on the respective ATO.

b. For purposes of this Part, a new boiler is one which commenced construction or reconstruction after June 4, 2010.

[40 CFR 63.11194(b)]

- c. For purposes of this Part, an existing boiler is one which commenced construction or reconstruction on or before June 4, 2010.

[40 CFR 63.11194(c)]

2. Operating Requirements

- a. The Permittee shall operate and maintain the boiler, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator or Director that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.11205(a)]

- b. Work-Practice Standard

[40 CFR 63.11201(b)]

(1) Existing Boiler

(a) Initial Boiler Tune-up

- (i) The Permittee operating an existing oil-fired boiler shall conduct a tune-up of the boiler according to the procedures stated in Condition VI.G.2.c.

[40 CFR 63.11214(b)]

(b) Subsequent Boiler Tune-ups

- (i) Subsequent tune-ups for boilers greater than 5 MMBtu/hr heat input shall be conducted biennially (every two years), and shall be conducted no more than 25 months after the previous tune-up.

[40 CFR 63.11223(b)]

- (ii) Subsequent tune-ups for boilers less than or equal to 5 MMBtu/hr shall be conducted every 5 years. Each 5 year tune-up shall be conducted no more than 61 months after the previous tune-up.

[40 CFR 63.11223(e)]

(2) New Boiler

(a) Initial Boiler Tune-up

- (i) The Permittee operating a new boiler with a heat input rate greater than 5 MMBtu/hr shall conduct an initial

boiler tune-up according to the procedures stated in Condition VI.G.2.c no later than 25 months after the initial startup.

[40 CFR 63.11223(b)]

- (ii) The Permittee operating a new oil-fired boiler with a heat input rate less than or equal to 5 MMBtu/hr shall conduct a tune-up every 5 years. The tune-up shall be conducted according to the procedures stated in Condition VI.G.2.c no later than 61 months after the initial startup, or from the last tune-up.

[40 CFR 63.11223(e)]

(b) Subsequent Boiler Tune-ups

- (i) Subsequent tune-ups for boilers greater than 5 MMBtu/hr heat input shall be conducted biennially, and shall be conducted no more than 25 months after the previous tune-up.

[40 CFR 63.11223(b)]

c. Tune-up Procedures

[40 CFR 63.11223(b)]

In order to complete a tune up, the Permittee shall:

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (this may be delayed until the next scheduled unit shutdown, but the burner must be inspected at least once every 36 months).

[40 CFR 63.11223(b)(1)]

- (2) Inspects the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

[40 CFR 63.11223(b)(2)]

- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.

[40 CFR 63.11223(b)(3)]

- (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

[40 CFR 63.11223(b)(4)]

- (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

[40 CFR 63.11223(b)(5)]

- (6) Maintain onsite and submit, if requested by the Administrator or Director a report containing the information in the following conditions:
- [40 CFR 63.11223(b)(6)]
- (a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
- [40 CFR 63.11223(b)(6)(i)]
- (b) A description of any corrective actions taken as a part of the tune-up of the boiler.
- [40 CFR 63.11223(b)(6)(ii)]
- (c) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- [40 CFR 63.11223(b)(6)(iii)]
- (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.
- [40 CFR 63.11223(b)(7)]

3. Notification, Reporting and Recordkeeping Requirements

- a. As required in 40 CFR 63.9(b)(2), the Permittee shall submit the initial notification within 120 days after the facility becomes subject to this standard.
- [40 CFR 63.11225(a)(2)]
- b. The Permittee shall submit a Notice of Compliance Status in accordance with 63.9(h) no later than 120 days after the facility becomes subject to this standard, and shall include certification(s) of compliance statement signed by a responsible official that the facility complies with the requirements of Condition VI.G.2.b to conduct an initial tune-up of the boiler.
- [40 CFR 63.11225(a)(4)]
- c. The Permittee shall keep the following records to document continuous compliance conformance with the tune up requirements:
- (1) Records shall identify each boiler, the date of tune-up, the procedures followed for the tune-up, and the manufacturer's specifications to which the boiler was tuned.
- (2) Records shall document the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.
- [40 CFR 63.11225(c)(2)]

d. The Permittee shall maintain onsite and submit, if requested by the Administrator or Director, a biennial report containing the following information about the tune-ups.

[40 CFR 63.11223(b)(6), 11225(c)(4), and -(c)(5)]

- (1) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.
- (2) A description of any corrective actions taken as a part of the tune-up of the boiler.
- (3) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.
- (4) Records of occurrence, duration, and corrective action taken for each malfunction of the boiler.

4. Permit Shield

Compliance with this Part shall be deemed compliance 40 CFR 63.1194, 63.11201(b), 63.11205(a), 63.11214(b), 63.11223(b), 63.11223(e), 63.11225(a)(2), and 63.11225(c).

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

VII. INTERNAL COMBUSTION ENGINES NOT SUBJECT TO NSPS REQUIREMENTS

A. Applicability

This Section applies to internal combustion engines (ICE) not subject to NSPS on the associated ATO.

B. 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 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 VII.B.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. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any engine, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

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

2. Monitoring, Recordkeeping and Reporting Requirements

- a. The Permittee shall conduct monthly periodic opacity monitoring for all emission units as per Condition III.B.

[A.A.C. R18-2-306.A.3.c, .306.A.4.a and 306.A.5]

- b. The Permittee shall keep records of a current, valid purchase contract, tariff sheet or transportation contract. The records shall contain information regarding the lower heating value of the fuel. These records shall be made available to ADEQ upon request.

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

3. Permit Shield

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

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

C. Sulfur Dioxide

1. Emission Limitations and Standards

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]

2. Recordkeeping and Reporting Requirements

- a. For spark ignition (SI) engines, the Permittee shall maintain records of the gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel.

[A.A.C. R18-2-306.A.3.c and A.A.C. R18-2-719.I]

- b. For diesel engines, the Permittee shall keep records of fuel supplier certifications or other documentation listing the sulfur content to demonstrate compliance with the sulfur content limit specified in Condition VII.C.1 of this Attachment. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c and -719.I]

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

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-719.F, -H, -I, and -J.

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

D. Hazardous Air Pollutants

1. Applicability

- a. The requirements of this Section are applicable to any internal combustion engine marked on the ATO as applicable to 40 CFR 63 Subpart ZZZZ.
[40 CFR 63.6580 and 40 CFR 63.6590]

- b. A new or reconstructed stationary CI/ SI engine (constructed after June 12, 2006) shall meet the NESHAP requirements under 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart IIII/JJJJ in Section VIII or IX as applicable.

[40 CFR 63.6590(c)(1)]

- c. If an existing CI engine with a site rating of more than 300 HP located at an area source of HAP emissions is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112), the Permittee may comply with the requirements under this Section by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this Part.

[40 CFR 63.6603(e)]

2. General Requirements

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

[40 CFR 63.6605(b)]

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

[40 CFR 63.6625(h)]

3. Requirements for Emergency Engines

a. Operation Requirements

- (1) The Permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's

emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

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

[40 CFR 63.6603(a), and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (3) The Permittee shall change the oil and filter every 500 hours operation or within 1 year + 30 days of the previous change, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described below shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil.

[40 CFR 63.6625 (i) and (j), and 40 CFR Table 2d of Subpart ZZZZ]

- (a) The Permittee shall at a minimum analyze the following three parameters: Total Acid Number (for CI engines), Total Base Number (for SI engines), viscosity and water content. The condemning limits for these parameters are as follows:

(i) For natural gas-fired engine, Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new, and/or for diesel-fired engine, Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

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

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

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

- (b) Every 1,000 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, inspect and replace as necessary, spark plugs for SI engine, and/or air cleaner for CI engine.

[40 CFR 63, Subpart ZZZZ, Table 2d]

(c) The Permittee shall inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, and replace as necessary.

[40 CFR 63, Subpart ZZZZ, Table 2d]

(4) If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Conditions VII.D.3.a(3) through (c), or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated.

[40 CFR 63 Subpart ZZZZ, Table 2d]

(5) The Permittee shall operate the emergency engines according to the requirements in Conditions VII.D.3.a(5)(a) through (c) below. In order for the engines to be considered emergency stationary ICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance response, and operation in non-emergency situations for 50 hours per year, as described in these Conditions, is prohibited. If the emergency engine is not operated in accordance with the requirements in Conditions VII.D.3.a(5)(a) through (c) below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[40 CFR 60.6640 (f)]

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

[40 CFR 60.6640 (f)(1)]

(b) The Permittee may operate the emergency engine for any combination of the purposes specified in Condition in Conditions VII.D.3.a(5)(b)(i) through (iii) below for a maximum of 100 hours per calendar year. Any non-emergency situations as allowed by Condition VII.D.3.a(5)(c) below counts as part of the 100 hours per calendar year allowed by this condition.

[40 CFR 63.6640(f)(2)]

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

Federal, State, or local standards require maintenance and testing beyond 100 hours per year. Copies of records shall be made available to ADEQ upon request.

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

- (ii) The Permittee may operate the emergency engine for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

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

- (iii) The Permittee may operate the emergency engine for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

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

- (c) The Permittee may operate an emergency engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Conditions VII.D.3.a(5)(b)(i) through (iii) above. Except as provided in Conditions VII.D.3.a(5)(b)(i) through (iii) above and Condition VII.D.3.a(5)(c)(i) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f)(4)]

- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met.

[40 CFR 63.6640(f)(4)(ii)]

- (ii) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

- (iii) The dispatch follows reliability emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

- (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- (d) Any emergency engine that has a site rating of more than 100 brake HP, a displacement of less than 30 liters per cylinder, uses diesel fuel, and operates or is contractually obligated to be available for more than 15 hours per calendar year for purposes specified in Conditions VII.D.3.a(5)(b)(ii) and (iii) above or that operates for the purpose specified in Condition VII.D.3.a(5)(c)(i) above, the Permittee shall use diesel fuel that meets the requirements in 40 CFR 1090.305 for non-road diesel fuel, except that any existing fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- (e) *The Permittee shall install a non-resettable hour meter if one is not already installed.*

[40 CFR 63.6604(b)]

[40 CFR 63.6625(f), R18-2-331.A.3.c]

[Material Permit Conditions are indicated by underline and italics]

b. Recordkeeping Requirements

- (1) The Permittee shall keep records of the hours of operation of the RICE that is recorded through the non-resettable hour meter. Records shall include the date, start and stop times, hours spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Conditions VII.D.3.a(5)(b)(ii) and (iii) or Condition VII.D.3.a(5)(c)(i), the Permittee shall keep records of the notification of the emergency situation and the date, start time, and end time of the engine operation for these purposes.
- (2) The Permittee shall keep records of the parameters that are analyzed and the results of the oil analysis, if any, and the oil changes for the engine.
- (3) The Permittee shall keep records of the maintenance conducted on the engine in order to demonstrate that the engine and after-treatment

[40 CFR 63.6655(f)]

[40 CFR 63.6625(i) and (j)]

control device (if any) were operated and maintained in accordance with the Permittee's maintenance plan.

[40 CFR 63.6655(e)]

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

[40 CFR 63.6655(f)(2)]

c. Reporting Requirements

- (1) For emergency engine with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Conditions VII.D.3.a(5)(b)(ii) and (iii) or Condition VII.D.3.a(5)(c)(i), the Permittee shall submit to the Administrator and Director annually, a report according to the following requirements:

[40 CFR 63.6650(h)]

- (a) Company name and address where the engine is located.
[40 CFR 63.6650(h)(1)(i)]
- (b) Date of the report and beginning and ending dates of the reporting period.
[40 CFR 63.6650(h)(1)(ii)]
- (c) Engine site rating and model year.
[40 CFR 63.6650(h)(1)(iii)]
- (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
[40 CFR 63.6650(h)(1)(iv)]
- (e) Hours operated for the purpose specified in Condition Conditions VII.D.3.a(5)(b)(ii) and (iii), including the date, start time, and end time for the engine operation.
[40 CFR 63.6650(h)(1)(v)]
- (f) Number of hours the engine is contractually obligated to be available for the purposes specified in Conditions VII.D.3.a(5)(b)(ii) and (iii).
[40 CFR 63.6650(h)(1)(vi)]
- (g) Hours spent for operation for the purposes specified in Condition VII.D.3.a(5)(c)(i), including the date, start time, and end time for engine operation for the purposes specified in Condition VII.D.3.a(5)(c)(i) The report shall also identify

the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

[40 CFR 63.6650(h)(1)(vii)]

- (h) If there were no deviations from the fuel requirements in 40 CFR 80.510(b) that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

[40 CFR 63.6650(h)(1)(viii)]

- (i) If there were deviations from the fuel requirements in 40 CFR 80.510(b) that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

[40 CFR 63.6650(h)(1)(ix)]

- (2) The first annual report shall cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

[40 CFR 63.6650(h)(2)]

- (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (wwwhttps://cdx.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed below.

(a) EPA Region IX, Director, Air Division
75th Hawthorne Street
San Francisco, CA 94105

(b) Director, Air Quality Division
1110 W. Washington Street
Phoenix, AZ 85007

[40 CFR 63.6650(h)(3)]

- (4) The annual report specified in § 63.6650(h) and all other semiannual or annual reports, submit all semiannual and annual subsequent compliance reports using the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for this subpart and following the procedure specified in § 63.9(k), except any CBI must be submitted according to the procedures in § 63.6645(h). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

[40 CFR 63.6650(i)]

4. Requirements for Non-Emergency Compression Ignition Engines

a. Operation Requirements for CI Engines < 300 HP

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

[40 CFR 63.6625(e)]

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

[40 CFR 63.6603(a), and 40 CFR 63, Subpart ZZZZ, Table 2d]

(a) The Permittee shall change the oil and filter every 1,000 hours operation or within 1 year + 30 days of the previous change, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described below shall be completed. The oil analysis shall be performed at the same frequency specified for changing the oil.

[40 CFR 63.6625(i) and (j), and 40 CFR Table 2d of Subpart ZZZZ]

(i) The Permittee shall at a minimum analyze the following three parameters: Total Acid Number, viscosity and water content. The condemning limits for these parameters are as follows:

(a) Total Base Number is less than 30 percent of the Total Base Number of the oil when new,

(b) Viscosity has changed more than 20 percent from the viscosity of oil when new;

(c) Water Content is greater than 0.5 percent by volume.

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

(b) Every 1,000 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, the Permittee shall inspect and replace air cleaner as necessary.
[40 CFR 63, Subpart ZZZZ, Table 2d]

(c) Every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, the Permittee shall inspect all hoses and belts and replace as necessary.
[40 CFR 63, Subpart ZZZZ, Table 2d]

(3) Continuous Compliance Requirements

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

[Table 6 to 40 CFR 63 Subpart ZZZZ]

b. Operating Requirements for CI Engines >300 HP

(1) Fuel Limitations

The Permittee shall use diesel fuel that meets the requirements in 40 CFR 1090.305 for non-road diesel fuel.

[40 CFR 63.6604(a)]

(2) Emission Limitations

(a) The Permittee shall comply with either of the following emission limitations:

[40 CFR 63.6603(a), and 40 CFR 63, Subpart ZZZZ, Table 2d]

(i) The Permittee shall limit concentration of CO in the engine exhaust to

(a) 49 ppmv at 15 percent O₂ for engines between 300-500 HP,

(b) 23 ppmvd at 15 percent O₂ for engines greater than 500 HP;

(ii) The Permittee shall reduce CO emissions by 70%

(b) If any more than 500 HP engine is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112, the Permittee may, for up to 12 years after the installation date of the engine but not later than June 1, 2018, choose to comply with the management practices in Condition VII.D.4.a(2) instead of the applicable emission limitations in Condition

VII.D.4.b(2) above, and crankcase ventilation system requirements Condition VII.D.4.b(3) below. The Permittee shall comply with the emission limitations in Condition VII.D.4.b(2) no later than 12 years after the installation date of the engine or June 1, 2018, whichever is earlier. The Permittee shall also comply with the crankcase ventilation system requirements in Condition VII.D.4.b(3) no later than 12 years after the installation date of the engine or June 1, 2018, whichever is earlier.

[40 CFR 63.6603(d)]

(3) Operation and Maintenance Requirements

- (a) The Permittee shall follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Director to approve different maintenance requirements that are as protective as manufacturer requirements.

[40 CFR 63.6625(g)]

- (b) If the CI engine is not equipped with a closed crankcase ventilation system, the Permittee shall either

- (i) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

[40 CFR 63.6625(g)(1)]

- (ii) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

[40 CFR 63.6625(g)(2)]

c. Operating Limitations (Only for Engines > 500 HP)

[40 CFR 63.6603, Table 2b to 40 CFR 63 Subpart ZZZZ]

- (1) If the Permittee is using an oxidation catalyst to comply with the requirement to limit or reduce the concentration of CO;

- (a) The Permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and

- (b) The Permittee shall maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 450° F and less than or equal to 1350° F.

- (2) If the Permittee is not using an oxidation catalyst to comply with the requirement to limit or reduce the concentration of CO, the Permittee shall comply with any operating limitations approved by the Director.

d. Monitoring Requirements (Only for Engines greater than 500 HP)

The Permittee may choose use Continuous Emissions Monitoring System (CEMS) or Continuous Parametric Monitoring System (CPMS) for monitoring CO emissions.

- (1) If the Permittee elects to use CEMS, the Permittee shall install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in 40 CFR 63.6625(a). If the Permittee is meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If the Permittee is meeting a requirement to limit the concentration of CO, the CEMS shall be installed at the outlet of the control device.

[40 CFR 63.6625(a) and A.A.C R18-2-331.A.3.c]

[Material Permit Condition indicated by italics and underline]

- (2) If the Permittee is complying with the requirement to reduce CO emissions, or to limit the concentration of CO, and is using oxidation catalyst and CPMS, the Permittee shall install, operate, and maintain each CPMS to continuously monitor catalyst inlet temperature and catalyst pressure drop according to the requirements in in 40 CFR 63.6625(b).

[40 CFR 63.6625(b) and A.A.C R18-2-331.A.3.c]

[Material Permit Condition indicated by italics and underline]

- (3) If the Permittee is complying with the requirement to reduce CO emissions, or to limit the concentration of CO, and is not using oxidation catalyst, the Permittee shall install, operate, and maintain CPMS to continuously monitor operating parameters approved by the Director (if any) according to the requirements in 40 CFR 63.6625(b).

[40 CFR 63.6625(b) and A.A.C R18-2-331.A.3.c]

[Material Permit Condition indicated by italics and underline]

e. Initial Performance Test/Compliance Demonstration

- (1) Initial Performance Test

[40 CFR 63.6612(a), 40 CFR 63.6630, Table 5 to 40 CFR 63 Subpart ZZZZ]

- (a) For the engines not equipped with CEMS

- (i) The Permittee shall conduct initial performance test in accordance with the method in Table 5 of 40 CFR 63 Subpart ZZZZ to demonstrate compliance with the emission limits in Condition VII.D.4.b(2). If the Permittee is complying with the requirement to reduce CO emissions, or to limit the concentration of CO, and is using oxidation catalyst and CPMS, the Permittee shall record the catalyst pressure drop and

catalyst inlet temperature during the initial performance test using the CPMS installed according to the requirements in 40 CFR 63.6625(b).

- (ii) If the Permittee is complying with the requirement to reduce CO emissions, or to limit the concentration of CO, and is not using oxidation catalyst, the Permittee shall record the approved operating parameters (if any) using the CPMS installed according to the requirements in 40 CFR 63.6625(b).

- (b) For engines equipped with CEMS, the Permittee shall demonstrate initial compliance by

- (i) Conducting a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR part 60, appendix B

- (ii) Demonstrating that the average concentration of CO, or the average reduction of CO calculated using 40 CFR 63.6620 is less than or equal to the CO emission limitation. The initial test shall comprise the first 4-hour period after successful validation of the CEMS. Compliance shall be based on the average concentration measured during the 4-hour period or, the average percent reduction achieved during the 4-hour period.

- (c) The Permittee is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in the Conditions below:

[40 CFR 63.6612(b)]

- (i) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

- (ii) The test must not be older than 2 years.

- (iii) The test must be reviewed and accepted by the Director.

- (iv) Either no process or equipment changes must have been made since the test was performed, or the Permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

f. Continuous Compliance/Subsequent Performance Test Requirements

- (1) For engines not using CEMS, the Permittee shall conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first, in accordance with the method in Table 5 of 40 CFR 63 Subpart ZZZZ to demonstrate compliance with the emission limits in Condition VII.D.4.b(2).

[40 CFR 63.6615, Tables 3 and 6 to 40 CFR 63 Subpart ZZZZ]

- (2) For engines using oxidation catalyst,

- (a) The Permittee shall collect the catalyst inlet temperature data according to 40 CFR 63.6625(b), reduce these data to 4-hour rolling averages; and maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature established during the performance test; and

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

- (b) Measure the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

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

- (c) If the Permittee changes the catalyst, the Permittee shall reestablish the values of the operating parameters measured during the initial performance test. While reestablishing the values of the operating parameters, the Permittee shall also conduct a performance test to demonstrate that the Permittee is meeting the required emission limitation applicable to your stationary RICE.

[40 CFR 63.6640(b)]

- (3) For engines not using oxidation catalyst,

The Permittee shall collect the approved operating parameter (if any) data according to 40 CFR 63.6625(b); reduce these data to 4-hour rolling averages; and maintain the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

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

g. Notification Requirements

- (1) The Permittee shall submit all applicable notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

[40 CFR 6645(a)(2) and (a)(5)]

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

[40 CFR 63.6645(g)]

- (3) For engines greater than 300 HP required to conduct a performance test or initial compliance demonstration, the Permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii).
[40 CFR 63.6645(h)]

h. Recordkeeping Requirements

- (1) The Permittee shall keep the following records:
[40 CFR 63.6655(a)]
- (a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv);
 - (b) Records of the occurrence and duration (in hours) of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;
 - (c) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii);
 - (d) Records of all required maintenance performed on the air pollution control and monitoring equipment; and
 - (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition VII.D.2.a, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (2) For each CEMS or CPMS, the Permittee shall keep the following records.
- (a) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).
 - (b) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
 - (c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.
- (3) The Permittee shall keep the records of continuous compliance with each emission or operating limitation for the requirements in Condition VII.D.4.f.
[40 CFR 63.6655(d)]
- (4) For engines less than 300 HP and subject to management practices as shown in Condition VII.D.4.a(2), the Permittee shall keep records of the maintenance conducted on the stationary RICE in order to

demonstrate that , the Permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the Permittee's own maintenance plan.

[40 CFR 63.6655(e)]

i. Reporting Requirements

- (1) For engines greater than 300 HP, the Permittee shall submit semi-annual compliance in accordance with Section VII of Attachment A. [40 CFR 63.6650(a) and (b)]
- (2) The Compliance report shall contain the following information [40 CFR 63.6650(c)]
 - (a) Company name and address;
 - (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - (c) Date of report and beginning and ending dates of the reporting period;
 - (d) If the Permittee had a malfunction during the reporting period, the compliance report must include the starting and ending date and time, the duration (in hours), and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with Condition VII.D.2.a, including actions taken to correct a malfunction;
 - (e) If there are no deviations from any applicable emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period;
 - (f) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period;
 - (g) Engine site rating in brake HP, year construction of the engine commenced, and type of engine (CI, SI 2SLB, SI 4SLB, or SI 4SRB).
 - (h) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

- (i) An engine can be claimed as exempt from reporting coordinates (latitude/longitude) via CEDRI if:
 - (i) During the reporting period, the engine will be owned by, or operated by or for, an agency of the Federal Government responsible for national defense; and
 - (ii) The agency determines that disclosing the coordinates to the general public would be a threat to national security
- (j) For each deviation from an emission or operating limitation that occurs for a stationary RICE where the Permittee is not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report shall contain the information in Conditions VII.D.4.i(2)(a) through (d) above and the information below:

[40 CFR 63.6650(d)]

 - (i) The total operating time (in hours) of the stationary RICE at which the deviation occurred during the reporting period; and
 - (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
 - (iii) A description of any changes in processes, or controls since the last reporting period.
- (k) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, the Permittee shall include information in Conditions VII.D.4.i(2)(a) through (d) above and the information below:

[40 CFR 63.6650(e)]

 - (i) The date and time that each malfunction started and stopped.
 - (ii) The start and end date, and time, and duration (in hours) that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - (iii) The date, time, and duration (in hours) that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
 - (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

- (v) A summary of the total duration (in hours) of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - (vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - (vii) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
 - (viii) An identification of each parameter and pollutant that was monitored at the stationary RICE.
 - (ix) A brief description of the CMS.
 - (x) The date of the latest CMS certification or audit.
 - (xi) A description of any changes in CMS, processes, or controls since the last reporting period.
 - (xii) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
- (3) Within 60 days after the date of completing each performance test required by this subpart, the Permittee shall submit the results of the performance test following the procedure specified in § 63.9(k). Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or alternate electronic file. [40 CFR 63.6620(j)]
- (4) within 60 days after the date of completing each continuous emissions monitoring system (CEMS) performance evaluation (as defined in § 63.2) that includes a relative accuracy test audit (RATA), the Permittee shall submit the results of the performance evaluation following the procedures specified in § 63.9(k). The results of performance evaluations of CEMS measuring RATA pollutants that

are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website. The results of performance evaluations of CEMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation must be included as an attachment in the ERT or alternate electronic file.

[40 CFR 63.6625(a)(5)]

5. Requirements for Non-Emergency Spark Ignition Engines

a. Operation Requirements for 2 SLB Engines, 4 SRB (<500 HP) and 4SLB (<500 HP) Engines

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

[40 CFR 63.6625(e)(5), (7) and (8)]

(2) Operation and Maintenance Requirements

- (a) The Permittee shall comply with the operation and maintenance requirements in Conditions VII.D.5.a(2)(b), (c) and (d) at the following frequencies:

[40 CFR 63.6603(a) and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (i) For 2 SLB engines: Every 4,320 hours operation or annually, whichever comes first; and
- (ii) For 4SLB and 4SRB engines (<500 HP): Every 1,440 hours operation or annually, whichever comes first.

- (b) The Permittee shall change the oil and filter. If the Permittee prefers to extend the oil change requirement, an oil analysis program described below shall be completed. The oil analysis shall be performed at the same frequency specified for changing the oil.

[40 CFR 63.6625(j) and 40 CFR Table 2d of Subpart ZZZZ]

- (i) The Permittee shall at a minimum analyze the following three parameters: Total Acid Number, viscosity and water content. The condemning limits for these parameters are as follows:

- (a) Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new,

- (b) Viscosity has changed more than 20 percent from the viscosity of oil when new;
- (c) Water Content is greater than 0.5 percent by volume.
- (d) If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the above limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. Records must be kept of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the operation of the engine.

(c) The Permittee shall inspect spark plugs and replace as necessary.

[40 CFR Table 2d of Subpart ZZZZ]

(d) The Permittee shall inspect all hoses and belts and replace as necessary.

[40 CFR Table 2d of Subpart ZZZZ]

(3) Continuous Compliance Requirements

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

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

b. Operating Requirements for 4SLB and 4SRB Engines >500HP

(1) Air Pollution Control Requirements

(a) For 4SLB engines, the Permittee shall install and operate an oxidation catalyst to reduce HAP emissions.

[Table 2d to 40 CFR 63 Subpart ZZZZ, A.A.C. R18-2-331.A.3.d and e]
 [Material Permit Conditions indicated by italics and underline]

(b) For 4SRB engines, the Permittee install and operate non selective catalytic reduction (NSCR) to reduce HAP emissions.

[Table 2d to 40 CFR 63 Subpart ZZZZ, A.A.C. R18-2-331.A.3.d and e]
 [Material Permit Conditions indicated by italics and underline]

(2) Monitoring Requirements

- (a) The Permittee shall install and operate a continuous parametric monitoring system (CPMS) to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b), or

[40 CFR 63.6625(b), A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions indicated by italics and underline]

- (b) The Permittee shall install equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F for 4SLB engine and/or 1250 °F for 4SRB engine.

[40 CFR 63.6640 and Table 5 to 40 CFR 63 Subpart ZZZZ A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions indicated by italics and underline]

(3) Initial Performance Test/Compliance Demonstration

- (a) Within 180 days of issuance of the permit, the Permittee shall conduct initial performance test in accordance with the method in Table 4 of 40 CFR 63 Subpart ZZZZ to demonstrate compliance the following emission limits:

[40 CFR 63.6630(a) and Table 5 to 40 CFR 63 Subpart ZZZZ]

- (i) For 4SRB engine, the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O₂;
- (ii) For 4SLB engine, the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O₂, or the average reduction of emissions of THC is 30 percent or more;

- (b) Compliance Demonstration procedure

[40 CFR 63.6630(e)]

- (i) The compliance demonstration shall consist of at least three test runs.
- (ii) Each test run shall be of at least 15 minute duration, except that each test conducted using the method in Appendix A to 40 CFR 63 shall consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
- (iii) If the Permittee is demonstrating compliance with the CO concentration or CO percent reduction requirement, the Permittee shall measure CO emissions using one of the CO measurement methods specified in Table 4 of 40 CFR Part 63 Subpart ZZZZ, or using appendix A to 40 CFR Part 63.

- (iv) If the Permittee is demonstrating compliance with the THC percent reduction requirement, the Permittee shall measure THC emissions using Method 25A, reported as propane, of 40 CFR Part 60, appendix A.
 - (v) The Permittee shall measure O₂ using one of the O₂ measurement methods specified in Table 4 of 40 CFR Part 63 Subpart ZZZZ. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO or THC concentration.
 - (vi) If the Permittee is demonstrating compliance with the CO or THC percent reduction requirement, the Permittee shall measure CO or THC emissions and O₂ emissions simultaneously at the inlet and outlet of the control device.
- (4) Subsequent Performance Test Requirements
- (a) The Permittee shall conduct annual performance test in accordance with the method in Table 4 of 40 CFR 63 Subpart ZZZZ to demonstrate compliance the emission limits in Conditions VII.D.5.b(3)(a)(i) and (ii). The annual compliance demonstration shall consist of at least one test run in accordance with the procedure in Condition VII.D.5.b(3)(b) above.
[40 CFR 63.6640(a) and (c), Table 6 to 40 CFR 63 Subpart ZZZZ]
 - (b) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Conditions VII.D.5.b(3)(a)(i) and (ii), the engine shall be shut down as soon as safely possible, and appropriate corrective action shall be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE shall be retested within 7 days of being restarted and the emissions must meet the levels specified in Conditions VII.D.5.b(3)(a)(i) and (ii). If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the Permittee demonstrates through testing that the emissions do not exceed the levels specified in Conditions VII.D.5.b(3)(a)(i) and (ii).
[40 CFR 63.6640(c)(7)]
- (5) Continuous Compliance Requirements
- (a) For 4SLB engine, the Permittee shall demonstrate continuous compliance by collecting the catalyst inlet temperature data according to Condition VII.D.5.b(2)(a), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less

than or equal to 1350 °F for the catalyst inlet temperature; or immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.

Table 6 to 40 CFR 63 Subpart ZZZZ

- (b) For 4SRB engine, the Permittee shall demonstrate continuous compliance by collecting the catalyst inlet temperature data according to Condition VII.D.5.b(2)(a), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

Table 6 to 40 CFR 63 Subpart ZZZZ

c. Notification Requirements

- (1) The Permittee shall submit all applicable notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

[40 CFR 6645(a)(2) and (a)(5)]

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

[40 CFR 63.6645(g)]

- (3) For 4 SRB or 4 SLB engines greater than 500 HP and required to conduct a performance test or initial compliance demonstration, the Permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii).

[40 CFR 63.6645(h)]

d. Recordkeeping Requirements

- (1) The Permittee shall keep records described below:

[40 CFR 63.6655(a)]

- (a) A copy of each notification and report that the Permittee submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).

- (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

- (c) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

- (d) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition VII.D.2.a including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (2) For each CPMS, the Permittee shall keep the following records:
[40 CFR 63.6655(b)]
- (a) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).
 - (b) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
 - (c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.
- (3) The Permittee shall keep the records to show continuous compliance with each emission or operating limitation for the requirements in Condition VII.D.5.b(5).
[40 CFR 63.6655(d)]
- (4) For 2 SLB engines, 4 SRB (<500 HP) engines, and 4SLB (<500 HP) engines subject to management practices in Condition, the Permittee shall keep records of the maintenance conducted on the engines in order to demonstrate that the Permittee operated and maintained the engine and after-treatment control device (if any) according to the Permittee's own maintenance plan.
[40 CFR 63.6655(e)]

e. Reporting Requirements

- (1) The Permittee shall submit semi-annual compliance in accordance with Section VII of Attachment A.
[40 CFR 63.6650(a) and (b)]
- (2) For 4SRB and 4SLB engines (> 500 HP), the compliance report shall contain the result of annual compliance demonstration, if conducted during the reporting period.
[40 CFR 63.6650(a), Table 7 to 40 CFR 63 Subpart ZZZZ]
- (3) The Compliance report shall contain the following information
[40 CFR 63.6650(c)]
- (a) Company name and address;

- (b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - (c) Date of report and beginning and ending dates of the reporting period;
 - (d) If the Permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction;
 - (e) If there are no deviations from any applicable emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period; and
 - (f) If there were no periods during which the CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (4) For each deviation from an emission or operating limitation that occurs for an engine where the Permittee is not using a CMS to comply with the operating limitations, the Compliance report shall contain the information in Conditions VII.D.5.e(3)(a) through (d) above and the information below:
- [40 CFR 63.6650(d)]
- (a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period;
 - (b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (5) For each deviation from an emission or operating limitation occurring for an engine where the Permittee is using a CMS to comply with the operating limitations, the Permittee shall include information in Conditions VII.D.5.e(3)(a) through (d) above and the information below:
- [40 CFR 63.6650(e)]
- (a) The date and time that each malfunction started and stopped;

- (b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks;
- (c) The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8);
- (d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;
- (e) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;
- (f) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;
- (g) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period;
- (h) An identification of each parameter and pollutant that was monitored at the stationary RICE;
- (i) A brief description of the stationary RICE;
- (j) A brief description of the CMS;
- (k) The date of the latest CMS certification or audit; and
- (l) A description of any changes in CMS, processes, or controls since the last reporting period.

6. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR Part 63.6590(a)(1), 63.6590(c)(1), 63.6603(a), 63.6603(d), 63.6603(e), 63.6604(a), 63.6605(b), 63.6612(a), 63.6615, 63.6625(a), 63.6625(b), 63.6625(e), 63.6625(f), 63.6625(g), 63.6625(h), 63.6625(i), 63.6625(j), 63.6630(a), 63.6630(e), 63.6640(a), 63.6640(c), 63.6640(f), 63.6645(a), 63.6645(g), 63.6645(h), 63.6650(a) through (e), 63.6650(h), 63.6655(a), 63.6655(b), 63.6655(d), 63.6655(e), and 63.6655(f)

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

**VIII. INTERNAL COMBUSTION COMPRESSION IGNITION ENGINES SUBJECT TO NSPS
SUBPART III**

A. Applicability

1. This Section applies to compression ignition internal combustion engines (CI ICE) marked as Subject to NSPS Subpart IIII on the associated ATO.
2. Compression ignition (CI) internal combustion engines (ICE) that commenced construction after July 11, 2005, where the stationary CI ICE are:
[40 CFR 60.4200(a)(2)]
 - a. Manufactured after April 1, 2006, and are not fire pump engines, or
[40 CFR 60.4200(a)(2)(i)]
 - b. Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
[40 CFR 60.4200(a)(2)(ii)]
3. Any stationary CI ICE that are modified or reconstructed after July 11, 2005.
[40 CFR 60.4200(a)(3)]
4. Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
[40 CFR 4200(d)]

B. General Requirements

1. Operating Requirements
 - a. The Permittee shall operate and maintain the CI-ICE to comply with the emission standards as required in Condition VIII.C.1. a through d over the entire life of the engine.
[40 CFR 60.4206]
 - b. The Permittee shall operate and maintain the CI-ICE and any control device according to the manufacturer's emission-related written instructions, or demonstrate compliance in accordance with Condition VIII.C.1.e.
[40 CFR 60.4211(a)(1), and -4211(g)]
 - c. The Permittee shall change only those emission-related settings that are permitted by the manufacturer, or demonstrate compliance in accordance with Condition VIII.C.1.e.
[40 CFR 60.4211(a)(2), and -4211(g)]
 - d. The Permittee shall meet the requirements of 40 CFR part 1068, as they apply.
[40 CFR 60.4211(a)(3)]
2. Fuel Requirements
 - a. An engine with a displacement < 30 l/cyl must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel.
[40 CFR 60.4207(b)]
 - (1) Sulfur content; 15 ppm maximum; and

- (2) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
- b. Engine with a national security exemption under 40 CFR 60.4200(d) are exempt from the fuel requirements of this section.
[40 CFR 60.4207(e)]
3. If an engine is equipped with a diesel particulate filter to comply with the emission standards in Condition VIII.C.1. a through d, the Permittee shall install, maintain, and operate the particulate filter in accordance with good air pollution control practices for minimizing emissions.
[A.A.C. R18-2-306.01 and -331.A.3.d and e]
[Material permit conditions are indicated by underline and italics]

C. Non-Emergency Generators

1. Emission Limitations and Standards

The Permittee operating a new, modified or reconstructed non-emergency CI-ICE subject to this section shall comply with the emission standards identified as follows for the corresponding model year, horsepower (hp) and liters per cylinder (l/cyl) displacement:

[40 CFR 60.4204(e)]

- a. Pre-2007 model year with displacement of < 10 l/cyl;

The Permittee must comply with the emission standards in Table 2 of this section.

[40 CFR 60.4204(a) and Table 1 of 40 CFR Subpart IIII]

Table 2: Non-Emergency Generator Emission Limits

Maximum Engine Power	g/KW-hr (g/HP-hr)				
	NMHC + NOX	HC	NOX	CO	PM
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

450≤KW≤560 (600≤HP≤750)	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

- b. Pre-2007 model year with displacement $10 \leq$ and < 30 l/cyl;
- (a) The Permittee must comply with the emission standards in 40 CFR 94.8(a)(1). [40 CFR 60.4204(a)]
- c. 2007 and later model years with displacement < 30 l/cyl; [40 CFR 60.4204(b)]
- (1) Displacement < 10 l/cyl and maximum engine power $\leq 3,000$ hp;
- (2) Must meet the emission standards for new nonroad compression ignition engines in 40 CFR 1039.101, 1039.102, 1039.104, 1039.105, 1039.107, 1039.115, and 40 CFR part 1039 appendix I as applicable, for all pollutants, for the same model year and maximum engine power. [40 CFR 60.4201(a)]
- (3) Displacement < 10 l/cyl and maximum engine power $> 3,000$ hp;
- (a) Model year 2007 through 2010;
The Permittee must comply with the emission standards in Table 1 of this section. [40 CFR 60.4201(b)]
- (b) Model year 2011 and later;
The Permittee must comply with the emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power. [40 CFR 60.4201(c)]
- (4) Displacement ≥ 10 l/cyl;
- (a) Model years 2007 through 2012;
The Permittee must comply with emission standards for new marine CI engines in 40 CFR part 1042 Appendix I as applicable for all pollutants. [40 CFR 60.4201(d)(1)]
- (b) Model year 2013;

(i) Displacement < 15 l/cyl;

(a) and maximum engine power < 4958 hp;

The Permittee must comply with the emission standards for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants.

[40 CFR 4201(e)(1)]

(b) and maximum engine power \geq 4958 hp;

The Permittee must comply with emission standards for new marine CI engines in 40 CFR 94.8 as applicable for all pollutants.

[40 CFR 60.4201(d)(2)]

(ii) Displacement \geq 15 l/cyl.

The Permittee must comply with emission standards for new marine CI engines in 40 CFR 94.8 as applicable for all pollutants.

[40 CFR 60.4201(d)(3)]

(c) Model year 2014 and later;

The Permittee must comply with the emission standards for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants.

[40 CFR 4201(e)(2)]

d. The Permittee operating a non-emergency CI engine that conducts performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4204(d)]

e. A Permittee that does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, must demonstrate compliance as follows:

[40 CFR 60.4211(g)]

(1) A stationary CI internal combustion engine with maximum engine power less than 100 HP, the Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the Permittee does not install and

configure the engine and control device according to the manufacturer's emission-related written instructions, or changes the emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 CFR 60.4211(g)(1)]

- (2) A stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the Permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer.

[40 CFR 60.4211(g)(2)]

- (3) The Permittee of a stationary CI internal combustion engine greater than 500 HP, shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer. The Permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)(3)]

2. Compliance Requirements

A Permittee operating an engine subject to any emission standard specified in Condition VIII.C.1 must demonstrate compliance according to one of the methods specified in this Section as applicable.

a. Pre-2007 model year with displacement < 30 l/cyl;

- (1) Purchasing an engine certified to emission standards, as applicable, for the same model year and maximum engine power as described in 40 CFR parts 1039 and 1042, as applicable. The engine shall be

installed and configured according to the manufacturer's specifications; or

[40 CFR 60.4211(b)(1)]

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test shall have been conducted using the same methods specified in Condition VIII.C.1 and these methods must have been followed correctly; or

[40 CFR 60.4211(b)(2)]

(3) Keeping records of engine manufacturer data indicating compliance with the standards; or

[40 CFR 60.4211(b)(3)].

(4) Keeping records of control device vendor data indicating compliance with the standards; or

[40 CFR 60.4211(B)(4)]

(5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.

[40 CFR 60.4211(b)(5)]

b. 2007 model year and later with displacement < 30 l/cyl;

[40 CFR 60.4211(c)]

(1) Purchasing an engine certified to the applicable emission standards specified in Condition VIII.C.1 for the same model year and maximum engine power; and

(2) The engine must be installed and configured according to the manufacturer's emission -related specifications.

c. For any engine that the Permittee conducts an in-use performance test;

(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in 40 CFR 60.4213.

[40 CFR 60.4211(d)(1)]

(2) Establishing operating parameters to be monitored continuously to ensure the engine continues to meet the emission standards. The Permittee must petition the Director for approval of operating parameters to be monitored continuously. The petition must include the following information;

[40 CFR 60.4211(d)(2)]

(a) Identification of the specific parameters you propose to monitor continuously; and

[40 CFR 60.4211(d)(2)(i)]

(b) A discussion of the relationship between these parameters and NO_x and PM emissions, identifying how the emissions of

these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_x and PM emissions; and

[40 CFR 60.4211(d)(2)(ii)]

- (c) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; and

[40 CFR 60.4211(d)(2)(iii)]

- (d) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

[40 CFR 60.4211(d)(2)(iv)]

- (e) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

[40 CFR 60.4211(d)(2)(v)]

- d. Modified or reconstructed engine subject to an applicable emission standard(s) specified in Condition VIII.C.1.

- (1) Purchase an engine certified to the applicable emission standard(s).

[40 CFR 60.4211(e)(1)]

- (2) Conduct a performance test to demonstrate initial compliance with the applicable emission standard(s) according to the requirements specified in 40 CFR 60.4212. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[40 CFR 60.4211(e)(2)]

3. Monitoring, Recordkeeping and Reporting Requirements

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

[40 CFR 60.4209(b) and A.A.C. R18-2-331.A.3.c]

[Material permit conditions are indicated by underline and italics]

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

[40 CFR 60.4214(c)]

- c. A Permittee operating an engine that meets any of the following specifications, > 3,000 hp, or a displacement \geq 10 l/cyl, or is a pre-2007 model year > 175 hp and not certified, must:

[40 CFR 60.4212(a)]

- (1) Submit an initial notification as required in 40 CFR 60.7(a)(1), including:

[40 CFR 60.4214(a)(1)]

 - (a) Name and address of the Permittee; and
[40 CFR 60.4214(a)(1)(i)]
 - (b) The address of the affected source; and
[40 CFR 60.4214(a)(1)(ii)]
 - (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; and
[40 CFR 60.4214(a)(1)(iii)]
 - (d) Emission control equipment; and
[40 CFR 60.4214(a)(1)(iv)]
 - (e) Fuel used.
[40 CFR 60.4214(a)(1)(v)]
- (2) Keep records of the following information:

[40 CFR 60.4214(a)(2)]

 - (a) All notifications submitted to comply with this subpart and all documentation supporting any notification; and
[40 CFR 60.4214(a)(2)(i)]
 - (b) Maintenance conducted on the engine; and
[40 CFR 60.4214(a)(2)(ii)]
 - (c) If the engine is certified, documentation from the manufacturer that the engine is certified to meet the applicable emission standards; or
[40 CFR 60.4214(a)(2)(iii)]
 - (d) If the engine is not certified, documentation that the engine meets the emission standards.
[40 CFR 60.4214(a)(2)(iv)]

D. Emergency Engines

1. Operating Requirements

- a. *The Permittee shall install a non-resettable hour meter prior to startup of the engine.*

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

- b. The Permittee shall operate the emergency stationary ICE according to Condition VIII.D.1.b(1) through (3) in order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.

[40 CFR 60.4211(f)]

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.

[40 CFR 60.4211(f)(1)]

- (2) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition VIII.D.1.b(3) counts as part of the 100 hours per calendar year.

[40 CFR 60.4211(f)(2)]

- (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

[40 CFR 60.4211(f)(2)(i)]

- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in Condition VIII.D.1.b(2). Except as provided in Condition VIII.D.1.b(3)(a), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)(3)]

- (a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following Conditions are met:

[40 CFR 60.4211(f)(3)(i)]

- (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

[40 CFR 60.4211(f)(3)(i)(A)]

- (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that

could lead to the interruption of power supply in a local area or region.

[40 CFR 60.4211(f)(3)(i)(B)]

- (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

[40 CFR 60.4211(f)(3)(i)(C)]

- (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.

[40 CFR 60.4211(f)(3)(i)(E)]

- (v) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)(3)(i)(D)]

- c. If the Permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the Permittee changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

[40 CFR 60.4211(g)]

- (1) If the stationary CI internal combustion engine with maximum engine power less than 100 HP, the Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the Permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or the Permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

[40 CFR 60.4211(g)(1)]

- (2) For a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, the Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial

performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer.

[40 CFR 60.4211(g)(2)]

- (3) For a stationary CI internal combustion engine greater than 500 HP, the Permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer. The Permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[40 CFR 60.4211(g)(3)]

2. Emission Limitations and Standards

a. Fire Pump Engines

The Permittee shall comply with the following emission limits in Table 3: for fire pump engines with a displacement of less than 30 liters per cylinder:

[40 CFR 60.4205(c)]

Table 3: Fire Pump Engine Emission Limits (<30 liters per cylinder)

Maximum Engine Power (EP) (horsepower)	Model year	Emission Standard (g/HP-hr)		
		PM	NO _x	CO
EP < 11	2010 and earlier	0.75	7.8	6.0
	2011 and later	0.30	5.6	N/A
11 ≤ EP < 25	2010 and earlier	0.60	7.1	4.9
	2011 and later	0.30	5.6	N/A
25 ≤ EP < 50	2010 and earlier	0.60	7.1	4.1
	2011 and later	0.22	5.6	N/A
50 ≤ EP < 75	2010 and earlier	0.60	7.8	3.7
	2011 and later	0.30	3.5	N/A
75 ≤ EP < 100	2010 and earlier	0.60	7.8	3.7
	2011 and later	0.30	3.5	N/A
100 ≤ EP < 175	2009 and earlier	0.60	7.8	3.7
	2010 and later	0.22	3.0	N/A
175 ≤ EP < 300	2008 and earlier	0.40	7.8	2.6

	2009 and later	0.15	3.0	N/A
300 ≤ EP < 600	2008 and earlier	0.40	7.8	2.6
	2009 and later	0.15	3.0	N/A
600 ≤ EP ≤ 750	2008 and earlier	0.40	7.8	2.6
	2009 and later	0.15	3.0	N/A
EP > 750	2007 and earlier	0.40	7.8	2.6
	2008 and later	0.15	4.8	N/A

- (1) For model years 2011 through 2013, fire pump engines that are greater than 50 horsepower, but less than 100 horsepower with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.
[Note 1 to Table 4 to 40 CFR Subpart III]

- (2) For model years 2010 through 2012, fire pump engines that are greater than 100 horsepower, but less than 175 horsepower with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.
[Note 2 to Table 4 to 40 CFR Subpart III]

b. Emergency Engines

Pre-2007 model year emergency stationary internal combustion engines with:
[40 CFR 60.4205(a)]

- (a) A displacement of less than 10 liters per cylinder that are not fire pump engines shall comply with the following emission standards in Table 4 below:

Table 4: Fire Pump Engine Emission Limits (<10 liters per cylinder)

Maximum Engine Power (EP) (horsepower)	Emission Standard (g/HP-hr)				
	NMHC + NO _x	HC	NO _x	CO	PM
EP < 11	7.8			6.0	0.75
11 ≤ EP < 25	7.1			4.9	0.60
25 ≤ EP < 50	7.1			4.1	0.60
50 ≤ EP < 75			6.9		
75 ≤ EP < 100			6.9		
100 ≤ EP < 175			6.9		
175 ≤ EP < 300		1.0	6.9	8.5	0.40
300 ≤ EP < 600		1.0	6.9	8.5	0.40
600 ≤ EP ≤ 750		1.0	6.9	8.5	0.40
EP > 750		1.0	6.9	8.5	0.40

[40 CFR 94.8(a)(1)(iii)]

- (2) 2007 model year and later emergency internal combustion engines with a displacement of less than 30 liters per cylinder that are not fire pump engines shall comply with the appropriate emission limitation as follows:

[40 CFR 60.4205(b)]

- (a) 2007 model year and later engines with a maximum engine power less than or equal to 3,000 horsepower and a displacement of less than 10 liters per cylinder shall meet the emission standards specified below:

[40 CFR 60.4202(a)]

- (i) For engines with a maximum engine power less than 50 horsepower:

[40 CFR 60.4202(a)(1)]

- (a) 2007 model year engines shall meet the emission standards for new nonroad compression ignition engines in 40 part 1039, appendix I, for all pollutants, for the same model year and maximum engine power, and

- (b) 2008 model year and later engines shall meet the emission standards for new nonroad compression ignition engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and Table 2 to 40 CFR Part 60, Subpart III.

- (ii) For engines with a rated engine power greater than or equal to 50 horsepower, the Permittee shall meet the emission standards for new nonroad compression ignition engines in 40 CFR, part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105, for the same model year and maximum engine power.

[40 CFR 60.4202(a)(2)]

- (3) 2007 model year and later engines shall meet the emission standards for new marine compression ignition engines in 40 CFR, part 1042, appendix I, as applicable, for all pollutants, for the same displacement and rated engine power.

[40 CFR 60.4202(e)]

- c. Emergency stationary internal combustion engines with a displacement of less than 30 liters per cylinder that conduct performance tests in-use shall meet the NTE standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4205(e)]

- d. Modified or Reconstructed Emergency CI ICE

- e. Any modified or reconstructed emergency stationary internal combustion engine shall meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed internal combustion engine that are specified in Condition VIII.D.2.
[40 CFR 60.4205(f)]

3. Compliance Determinations

a. General Requirements

- (1) The Permittee shall operate and maintain the control device according to the manufacturer's written instructions or procedures that are developed by the Permittee and approved by the engine manufacturer. A copy of the instructions or procedures shall be kept on-site and made available to ADEQ upon request.
[40 CFR 60.4211(a) and A.A.C. R18-2-306.A.3]

b. Pre-2007 CI ICE

The Permittee of a pre-2007 model year stationary compression ignition internal combustion engine that is required to comply with the emission standards specified in VIII.D.2.b(1), shall demonstrate compliance according to one of the methods specified below:

- (1) Purchasing an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications.
- (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test shall have been conducted using the methods specified in this 40 CFR 60.4212 or 4213, and the methods shall have been followed correctly.
- (3) Keeping records of engine manufacturer data indicating compliance with the standards.
- (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.

[40 CFR 60.4211(b)]

c. 2007 and Later CI ICE

For 2007 model year and later internal combustion engines that are required to comply with the emission standards specified in Condition VIII.D.2.b(2), the Permittee shall comply by purchasing an engine certified to the emission standards in Condition VIII.D.2.b(2), as applicable, for the same model year

and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications.

[40 CFR 4211(c)]

- d. 2007 and Later Fire Pump Engines
- e. The Permittee of a 2007 model year and later stationary fire pump engines that is manufactured during or after the model year that applies to the fire pump engine power (EP) rating in the following table and that are required to comply with the emission standards specified in V.D.2.b.(1) shall comply by purchasing an engine certified to the emission standards as applicable, for the same model year and National Fire Protection Association (NFPA) nameplate engine power. The engine shall be installed and configured according to the manufacturer's specifications in Table 5 below.

Table 5: 2007 and Later Fire Pump Engines Applicability

Engine Power (EP) (horsepower)	Model Year
EP < 100	2011
100 ≤ EP < 175	2010
175 ≤ EP < 750	2009
EP ≥ 750	2008

[40 CFR 4211(c)]

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

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

4. Monitoring, Recordkeeping, and Reporting Requirements

- a. If the Permittee elects to meet the emission limitations contained in Condition VIII.D.2, the Permittee shall maintain records, including manufacturer specifications, demonstrating that the engine meets the horsepower and RPM specifications.

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

- b. Pre-2007 model year engines that are greater than 175 HP and are not certified shall meet the following requirements:

[40 CFR 60.4214(a)]

- (1) Submit an initial notification as required in 40 CFR 60.7(a)(1). The notification shall include the following:

[40 CFR 60.4214(a)(1)]

- (a) Name and address of the Permittee;

[40 CFR 60.4214(a)(1)(i)]

- (b) The address of the affected source;

[40 CFR 60.4214(a)(1)(ii)]

- (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
[40 CFR 60.4214(a)(1)(iii)]
- (d) Emission control equipment; and
[40 CFR 60.4214(a)(1)(iv)]
- (e) Fuel used.
[40 CFR 60.4214(a)(1)(v)]
- (2) Keep records of the information the following:
[40 CFR 60.4214(a)(2)]
 - (a) All notifications submitted to comply with this subpart and all documentation supporting any notification.
[40 CFR 60.4214(a)(2)(i)]
 - (b) Maintenance conducted on the engine.
[40 CFR 60.4214(a)(2)(ii)]
 - (c) If the stationary CI internal combustion engine is certified, documentation from the manufacturer that the engine is certified to meet the emission standards.
[40 CFR 60.4214(a)(2)(iii)]
 - (d) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.
[40 CFR 60.4214(a)(2)(iv)]
- c. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the Permittee is not required to submit an initial notification. Starting with the model years in the table below, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.
[40 CFR 60.4214(b)]
- d. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the Permittee shall keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached.
[40 CFR 60.4214(c)]
- e. For an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for specified in Condition VIII.D.1.b(3)(a), the Permittee shall submit an annual report according to the requirements below:
[40 CFR 60.4214(d)]
 - (1) The report shall contain the following information:

[40 CFR 60.4214(d)(1)]

- (a) Company name and address where the engine is located.
[40 CFR 60.4214(d)(1)(i)]
- (b) Date of the report and beginning and ending dates of the reporting period.
[40 CFR 60.4214(d)(1)(ii)]
- (c) Engine site rating and model year.
[40 CFR 60.4214(d)(1)(iii)]
- (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
[40 CFR 60.4214(d)(1)(iv)]
- (e) Hours spent for operation for the purposes specified in Condition **Error! Reference source not found.**, including the date, start time, and end time for engine operation for the purposes specified in Condition **Error! Reference source not found.** The report shall also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
[40 CFR 60.4214(d)(1)(vii)]

- (2) The first annual report shall cover the calendar year 2015 and shall be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year shall be submitted no later than March 31 of the following calendar year.
[40 CFR 60.4214(d)(2)]

- (3) The annual report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 60, Subpart IIII is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.
[40 CFR 60.4214(d)(3)]

- f. The Permittee shall submit the results of the performance test required under this section following the procedures specified in Conditions VIII.D.4.f(1) and (2) below.
[40 CFR 60.4214(f)]

- (1) ***Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test.*** Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), according to Condition VIII.D.4.g below. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file

consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

- (2) ***Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.*** The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI according to Condition VIII.D.4.g below.

- g. If the permittee is required to submit notifications or reports following the procedure specified in this Condition VIII.D.4.g, the Permittee shall submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, the Permittee shall submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in Conditions VIII.D.4.g(1) and (2). Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The Permittee shall submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this Condition VIII.D.4.g.

[40 CFR 60.4214(g)]

- (1) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described in Condition VIII.D.4.g, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.

(2) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader, Measurement Policy Group, and all other files should be sent to the attention of the Stationary Compression Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

h. If you are required to electronically submit a report through CEDRI in the EPA's CDX, the Permittee may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the Permittee shall meet the requirements outlined in Conditions VIII.D.4.h(1) through (7) below.

[40 CFR 60.4214(h)]

- (1) The Permittee shall have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.
- (2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.
- (3) The outage may be planned or unplanned.
- (4) The Permittee shall submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
- (5) The Permittee shall provide to the Administrator a written description identifying:
 - (a) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
 - (b) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;
 - (c) A description of measures taken or to be taken to minimize the delay in reporting; and
 - (d) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

- (6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.
 - (7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.
- i. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, the Permittee shall meet the requirements outlined in Conditions VIII.D.4.i(1) (5) below.
- [40 CFR 60.4214(i)]
- (1) The Permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage).
 - (2) The Permittee shall submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
 - (3) The Permittee shall provide to the Administrator:
 - (a) A written description of the force majeure event;
 - (b) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;
 - (c) A description of measures taken or to be taken to minimize the delay in reporting; and
 - (d) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.
 - (4) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

j. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.
[40 CFR 60.4214(j)]

k. The Permittee shall maintain monthly records of engine operation. The records shall include the purpose of operation and the duration of time the engine was operated. The record shall identify whenever the operation of the engine was for emergency purposes.
[A.A.C. R18-2-306.A.3.c]

5. Testing Requirements

a. The Permittee of an internal combustion engine with a displacement of less than 30 liters per cylinder that conducts performance tests pursuant to this Permit shall do so according to 40 CFR 60.4212.
[40 CFR 60.4212]

6. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4202(a), 60.4205(d), 60.4205(e), 60.4202(e), 60.4205(a), 60.4205(b), 60.4205(c), 60.4205(f), 60.4206, 60.4207(b), 60.4209(a), 60.4211(a), 60.4211(b), 60.4211(c), 60.4211(d), 60.4211(f), 60.4211(g), 60.4212, 60.4213, 60.4214(a), 60.4214(c), and 60.4214(d).

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

IX. INTERNAL COMBUSTION SPARK IGNITION ENGINES SUBJECT TO NSPS SUBPART JJJJ

A. Applicability

This Section is applicable to each emergency SI ICE (emergency generator) identified in the associated ATO as subject to New Source Performance Standards (NSPS) Subpart JJJJ.

B. Fuel Requirements

1. Gasoline Fuel Sulfur Limits

If the Permittee burns gasoline in the stationary emergency SI ICE, then that gasoline shall meet the per gallon sulfur limit of 80 parts per million (ppm) as stated in 40 CFR 1090.205.

[40 CFR 60.4235]

2. Permit Shield

Compliance with the condition of this Part shall be deemed compliance with 40 CFR 60.4235.

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

C. Operating Requirements

1. *The Permittee is prohibited from operating emergency SI ICE for any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year.*

[40 CFR 60.4243(d), A.A.C. R18-2-331.A.3.c]

[Material Permit Conditions are indicated by underline and italics]

2. *The Permittee shall install a non-resettable hour meter prior to start-up of the engine.*

[A.A.C. R18-2-306.A.3, A.A.C. R18-2-331.A.3.c, and 40 CFR 60.4237]

[Material Permit Conditions are indicated by underline and italics]

D. Emission Standards

1. The Permittee of a stationary SI ICE must operate and maintain the stationary SI ICE that achieves the emission standards as required by this Section over the entire life of the engine.

[40 CFR 60.4234]

2. The Permittee shall operate and maintain the stationary SI ICE such that it complies with the emission standards listed in Table 6 in Condition IX.D.12 except for engines applicable to Conditions IX.D.3 through 6 below.

[40 CFR 60.4234]

3. Stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in 40 CFR 60.4231(a).

[40 CFR 60.4233(a)]

4. Stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after January 1, 2009 that use gasoline must comply with the emission standards in 40 CFR 60.4231(b).

[40 CFR 60.4233(b)]

5. Stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or January 1, 2009 that are rich burn engines that use LPG must comply with the emission standards in 40 CFR 60.4231(c) for their stationary SI ICE.

[40 CFR 60.4233(c)]

6. Non-emergency stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c).

[40 CFR 60.4233(d)]

7. Emergency stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards listed in Table 6 in Condition IX.D.12.

[40 CFR 60.4233(d)]

8. Stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards listed in Table 6 in Condition IX.D.12 applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may meet those standards.

[40 CFR 60.4233(d)]
9. Stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards listed in table 1 in Condition IX.D.12. For stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the emission standards listed in table 1 in Condition IX.D.12, then the Permittee shall meet the CO certification (not field testing) standard for which the engine was certified.

[40 CFR 60.4233(e)]
10. Modified or reconstructed stationary SI ICE must meet the requirements as specified in Conditions IX.D.10.a through d of this section.

[40 CFR 60.4233(f)]

 - a. Stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with emission standards in 40 CFR 60.4231(a) for their stationary SI ICE. Engines with a date of manufacture prior to July 1, 2008 must comply with the emission standards specified in 40 CFR 60.4231(a) applicable to engines manufactured on July 1, 2008.
 - b. Stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline engines and are modified or reconstructed after June 12, 2006, must comply with the emission standards in 40 CFR 60.4231(b). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in 40 CFR 60.4231(b) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).
 - c. Stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in 40 CFR 60.4231(c). Engines with a date of manufacture prior to July 1, 2008 (or January 1, 2009 for emergency engines) must comply with the emission standards specified in 40 CFR 60.4231(c) applicable to engines manufactured on July 1, 2008 (or January 1, 2009 for emergency engines).
 - d. Stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in Conditions IX.D.6 through 8 or IX.D.9 as applicable, except that the Permittees of non-emergency engines and emergency engines greater than

or equal to 130 HP must meet a nitrogen oxides (NO_x) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO_x emission standard of 250 ppmvd at 15 percent oxygen (O₂), a CO emission standard 540 ppmvd at 15 percent O₂ (675 ppmvd at 15 percent O₂ for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O₂, where the date of manufacture of the engine is:

- (1) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP (except lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
- (2) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;
- (3) Prior to January 1, 2009, for emergency engines;
- (4) Prior to January 1, 2008, for non-emergency lean burn natural gas engines and LPG engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP.

11. Stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards applicable to field testing, except as indicated in Condition IX.D.9.

[40 CFR 60.4233(h)]

12. Emission Limits Table

Table 6: Table 1 to 40 CFR 60 Subpart JJJJ: NO_x, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), and Stationary Emergency Engines >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards ^a					
			g/HP-hr			ppmvd at 15% O ₂		
			NO _x	CO	VOC ^d	NO _x	CO	VOC ^d
Non-Emergency SI Natural Gas ^b and Non-Emergency SI Lean Burn LPG ^b	100 ≤ HP < 500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG	500 ≤ HP < 1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500 ≤ HP < 1,350)	HP ≥ 500	7/1/2007	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60

Emergency	25<HP<130	1/1/2009	°10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

13. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4233(a), 40 CFR 60.4233(b), 40 CFR 60.4233(c), 40 CFR 60.4233(d), 40 CFR 60.4233(e), 40 CFR 60.4233(f), and 40 CFR 60.4234.

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

E. Compliance Requirements

1. The Permittee of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in Conditions IX.D.3 through 5, shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, the Permittee shall meet one of the requirements specified in Conditions IX.E.1.a and IX.E.1.b of this section.

[40 CFR 60.4243(a)]

- a. If the Permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the Permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The Permittee shall also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as applicable. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance.

- b. If the Permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and the Permittee shall demonstrate compliance according to Conditions IX.E.1.b(1) through (3) of this section, as appropriate.

- (1) The Permittee of a stationary SI internal combustion engine less than 100 HP shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required.

- (2) The Permittee of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial

performance test in accordance with 40 CFR 60.4244 within 1 year of engine startup to demonstrate compliance.

- (3) The Permittee of a stationary SI internal combustion engine greater than 500 HP shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test in accordance with 40 CFR 60.4244 within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
2. The Permittee of a stationary SI internal combustion engine that has to comply with the emission standards in Conditions IX.D.6 through 8, or IX.D.9 as applicable, shall demonstrate compliance according to one of the methods specified in Conditions IX.E.9.a and IX.E.2.b below.

[40 CFR 60.4243(b)]

 - a. Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in Condition IX.E.1.
 - b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Conditions IX.D.6 through 8, or IX.D.9 as applicable, and according to the performance testing requirements specified 40 CFR 60.4244, as applicable, and according to Conditions IX.E.2.b(1) and (2) below.
 - (1) The Permittee of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance.
 - (2) The Permittee of a stationary SI internal combustion engine greater than 500 HP shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, The Permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
3. The Permittee of a stationary SI internal combustion engine that has to comply with the emission standards specified in Condition IX.D.10 shall demonstrate compliance according Conditions IX.E.2.b(1) or (2), except that if the Permittee complies according to Conditions IX.E.2.b(1), The Permittee shall demonstrate that the non-certified engine complies with the emission standards specified in Condition IX.D.10.

[40 CFR 60.4243(c)]

4. Emergency SI ICE

[40 CFR 60.4243(d)]

- a. The Permittee of an emergency stationary ICE, shall operate the emergency stationary ICE according to the requirements in Conditions IX.E.4.a(1) through (3) below. In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions IX.E.4.a(1) through (3) below, is prohibited. If you do not operate the engine according to the requirements in Conditions IX.E.4.a(1) through (3) below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.
- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) The Permittee shall operate the emergency stationary ICE for any combination of the purposes specified in Condition IX.E.4.a(2)(a) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition IX.E.4.a(3) counts as part of the 100 hours per calendar year allowed by Condition IX.E.4.a(2).
 - (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition IX.E.4.a(2). Except as provided in Condition IX.E.4.a(3)(a), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- (a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
5. A stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the Permittee is required to conduct a performance test in accordance with 40 CFR 60.4244 to demonstrate compliance with the emission standards of table 1 in Condition IX.D.12.
- [40 CFR 60.4243(e)]
6. If you are a Permittee of a stationary SI internal combustion engine that is less than or equal to 500 HP and purchase a non-certified engine or do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, the Permittee shall perform initial performance testing as indicated, but is not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of this paragraph (f), perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the

parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine.

[40 CFR 60.4243(f)]

7. It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

[40 CFR 60.4243(g)]

8. The Permittee of a stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and complies with the emission standards specified in Conditions IX.D.4 or 5, the Permittee shall comply by one of the methods specified in Conditions IX.E.8.a through d below.

[40 CFR 60.4243(h)]

- a. Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and configured according to the manufacturer's specifications.
- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
- c. Keeping records of engine manufacturer data indicating compliance with the standards.
- d. Keeping records of control device vendor data indicating compliance with the standards.

9. The Permittee of a modified or reconstructed stationary SI internal combustion engine that complies with the emission standards specified in Condition IX.D.10, the Permittee shall demonstrate compliance according to one of the methods specified in Conditions IX.E.9.a or b below.

[40 CFR 60.4243(i)]

- a. Purchasing, or otherwise owning or operating, an engine certified to the emission standards in IX.D.10, as applicable.
- b. Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in 40 CFR 60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

F. Notification, Reporting, and Recordkeeping Requirements

1. The Permittee operating an applicable stationary SI ICE must meet the following recordkeeping requirements:

[40 CFR 60.4245(a)]

- a. Records of all notifications submitted to comply with this Section and all documentation supporting any notification.
 - b. Maintenance conducted on the engine.
 - c. If the stationary SI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 1048, 1054, and 1060, as applicable.
 - d. If the stationary SI ICE is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.
[40 CFR 60.4245(a)(4)]
2. For all emergency stationary SI ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
[40 CFR 60.4245(b)]
 3. For all emergency stationary SI ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.
[40 CFR 60.4245(b)]
 4. For all emergency stationary SI ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[40 CFR 60.4245(b)]
 5. The Permittee operating a stationary SI ICE greater than or equal to 500 HP that has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the following information. The Permittee shall submit the notification electronically according to Condition IX.F.9 below.
[40 CFR 60.4245(c)]
 - a. Name and address of the Permittee;
 - b. The address of the affected source;
 - c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - d. Emission control equipment; and

e. Fuel used.

6. Permittees of stationary SI ICE that are subject to performance testing shall submit a copy of each performance test as conducted in § 60.4244 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference - see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. The Permittee shall submit reports electronically according to Condition IX.F.8 below.
[40 CFR 60.4245(d)]

7. The Permittee operating an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Conditions **Error! Reference source not found.** and (c), shall submit an annual report according to the requirements in Conditions IX.F.7.a through c below:
[40 CFR 60.4245(e)]

a. The report must contain the following information.

- (1) Company name and address where the engine is located;
- (2) Date of the report and beginning and ending dates of the reporting period;
- (3) Engine site rating and model year;
- (4) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place;
- (5) Hours operated for the purposes specified in Condition IX.E.4.a(3)(a), including the date, start time, and end time for engine operation for the purposes specified in Condition IX.E.4.a(3)(a). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

b. The first annual report shall cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
[40 CFR 60.4245(e)(2)]

c. The annual report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4. The Permittee shall submit annual report electronically according to Condition IX.F.9 below.

[40 CFR 60.4245(e)(3)]

8. The Permittee shall submit the results following the procedures specified in Condition IX.F.9 below. Data collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or an alternate electronic file.

[40 CFR 60.4245(f)]

9. If the Permittee is required to submit notifications or reports following the procedure specified in this Condition, the Permittee shall submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, the Permittee shall submit a complete file in the format specified in this subpart, including information claimed to be CBI, to the EPA following the procedures in Conditions IX.F.9.a and b below. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described earlier in this Condition.

[40 CFR 60.4245(g)]

- a. The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address oaqpscbi@epa.gov, and as described in Condition IX.F.9 above, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email oaqpscbi@epa.gov to request a file transfer link.
- b. If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: OAQPS Document Control Officer (C404-02), OAQPS, U.S. Environmental Protection Agency, 109 T.W. Alexander Drive, P.O. Box 12055, Research Triangle Park, North Carolina 27711. ERT files should be sent to the attention of the Group Leader,

Measurement Policy Group, and all other files should be sent to the attention of the Stationary Spark Ignition Internal Combustion Engine Sector Lead. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

10. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the Permittee shall meet the requirements outlined in Conditions IX.F.10.a through g below.
- [40 CFR 60.4245(h)]
- a. The Permittee shall have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.
 - b. The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.
 - c. The outage may be planned or unplanned.
 - d. The Permittee shall submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
 - e. The Permittee shall provide to the Administrator a written description identifying:
 - (1) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
 - (2) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;
 - (3) A description of measures taken or to be taken to minimize the delay in reporting; and
 - (4) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.
 - f. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.
 - g. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.
11. If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in Conditions IX.F.11.a through e below.

[40 CFR 60.4245(i)]

- a. The Permittee may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.*, hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.*, large scale power outage).
- b. The Permittee shall submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
- c. The Permittee shall provide to the Administrator:
 - (1) A written description of the force majeure event;
 - (2) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;
 - (3) A description of measures taken or to be taken to minimize the delay in reporting; and
 - (4) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.
- d. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.
- e. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

12. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

[40 CFR 60.4245(j)]

Permit Shield

- a. Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4245.

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

X. UNCLASSIFIED SOURCES

A. Applicability

This Section is applicable to equipment not classified under any other part of this general permit and any direct-fired equipment, including vapor generators.

B. Fuel Limitations

The Permittee shall burn only natural gas, or liquefied petroleum gas (butane or propane) in the direct-fired equipment, as identified on the ATO(s).

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

C. Operating Limitations

1. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under their control in such quantities or concentrations as to cause air pollution.

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

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

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

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

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

4. The Permittee shall not operate or use any machine, equipment, or other contrivance for the treatment or processing of animal or vegetable matter, separately or in combination, unless all gaseous vapors and gas entrained effluents from such operations, equipment, or contrivance have been either:

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

a. Incinerated to destruction, as indicated by a temperature measuring device, at not less than 1,200°F if constructed or reconstructed prior to January 1, 1989, or 1,600°F with a minimum residence time of 0.5 seconds if constructed or reconstructed thereafter; or

b. Passed through such other device which is designed, installed and maintained to prevent the emission of odors or other air contaminants and which is approved by the Director.

5. Permit Shield

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

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-702.B.3, -730.A.1, D, E, F, and G.

D. Particulate Matter and Opacity

1. Emission Limitations and Standards

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

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

b. $E = 4.10 P^{0.67}$

c. Where:

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

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

[A.A.C. R18-2-730.A.1.a]

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

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

h. Where, "E" and "P" are defined in condition IX.D.1.above.

[A.A.C. R18-2-730.A.1.b]

3. Permit Shield

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

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

E. Opacity

1. Emission Limitations

The Permittee shall not cause or allow to be discharged into the atmosphere, from any plume or effluent, visible emissions in excess of 20%, as determined by EPA Reference Method 9. Where the presence of uncombined water is the only reason for the exceedances of any visible emissions requirement, such exceedances shall not constitute a violation.

[A.A.C. R18-2-702.B.3 and C]

2. Monitoring, Recordkeeping and Reporting Requirements

The Permittee shall conduct monthly opacity monitoring for all emission units as per Condition III.B.

[A.A.C. R18-2-306.A.3.c, .306.A.4.a and 306.A.5]

3. Permit Shield

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

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

F. Nitrogen Oxides

1. Emission Limitations

[A.A.C. R18-2-730.A.3]

The Permittee shall not cause, allow or permit the discharge of nitrogen oxides, from the stacks of the fuel burning equipment, into the atmosphere in excess of 500 parts per million.

2. Permit Shield

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

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-730.A.3.

G. Sulfur Dioxide

1. Emission Limitations

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

The Permittee shall not cause, allow or permit the discharge of sulfur dioxide, from the stacks of the fuel burning equipment, into the atmosphere in excess of 600 parts per million.

2. Permit Shield

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

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-730.A.2.

XI. FUGITIVE DUST REQUIREMENTS

A. Applicability

Section XI applies to any non-point source of fugitive dust in the facility.

B. Particulate Matter and Opacity

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

1. Emission Limitations/Standards

- a. Opacity of emissions from any fugitive dust non-point source shall not be greater than 40%.

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

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

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

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

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

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

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

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

- (4) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne when crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust.

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

- (5) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.

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

(6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored to prevent excessive amounts of particulate matter from becoming airborne;

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

(7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents to prevent excessive amounts of particulate matter from becoming airborne;

[A.A.C R18-2-608]

(8) 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

Unpaved Roads and Storage Piles

Water, or an equivalent control, shall be used to control visible emissions from unpaved 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 Condition XI.B.1.b above were performed and the control measures that were adopted.

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

b. Opacity Monitoring Requirements

Each week, the Permittee shall monitor visible emissions from fugitive sources in accordance with Condition III.B.

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

C. Permit Shield

Compliance with Section IV shall be deemed compliance with A.A.C. R18-2-604, -605, -606, 607, -608, -614, and -804.B.

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

XII. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Limitations/Standards

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

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

- (1) Wet blasting;
- (2) Effective enclosures with necessary dust collecting equipment; or
- (3) Any other method approved by the Director.

b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity.

[A.A.C. R18-2-702.B.3]

2. Monitoring and Recordkeeping Requirement

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

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

- (1) The date the project was conducted;
- (2) The duration of the project; and
- (3) Type of control measures employed.

b. Each time an abrasive blasting project is conducted, the Permittee shall monitor visible emissions from the project in accordance with Condition III.B of Attachment "B".

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

3. Permit Shield

Compliance with Condition XII.A.1.a shall be deemed compliance with A.A.C. R18-2-702.B.3 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:

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.
[A.A.C.R18-2-727.A]
- (2) The Permittee or their designated contractor shall not either:
 - (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
 - (b) Thin or dilute any architectural coating with a photochemically reactive solvent.
[A.A.C.R18-2-727.B]
- (3) For the purposes of Condition XII.B.1.a(1), 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 Condition XII.B.1.a(2), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
[A.A.C.R18-2-727.C]
 - (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.
- (4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition XII.B.1.a(2), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
[A.A.C.R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

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

- (a) The date the project was conducted;
- (b) The duration of the project;
- (c) Type of control measures employed;
- (d) Safety Data Sheets (SDS) for all paints and solvents used in the project; and
- (e) The amount of paint consumed during the project.

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

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

c. Permit Shield

Compliance with Condition XII.B.1.a 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.

[A.A.C. R18-2-702.B.3]

b. Monitoring, Recordkeeping and Reporting Requirements

Each time a spray painting project is conducted, the Permittee shall monitor visible emissions in accordance with Condition III.B of Attachment "B".

c. Permit Shield

Compliance with Condition XII.B.2.a shall be deemed compliance with A.A.C.R18-2-702.B.3.

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

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

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

[A.A.C. R18-2-1101.A.12]

2. Monitoring and Recordkeeping Requirement

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

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

3. Permit Shield

Compliance with the Condition XII.C.1 shall be deemed compliance with A.A.C. R18-2-1101.A.12.

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

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ATTACHMENT "C": ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE MARICOPA COUNTY

I. APPLICABILITY

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.

[A.R.S. § 49-402(D)]

II. FACILITY WIDE REQUIREMENTS

A. Opacity

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]

B. Gaseous and Odorous Emissions

[320 §300]

The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under their control in such quantities or concentrations as to cause air pollution.

C. Air Pollution Control Requirements

1. Material Containment Required

Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalies, 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]

D. Operations and Maintenance (O&M) Plan for Emission Control System (ECS)

For the purposes of these 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.

For each ECS that is used to comply with this rule or an air pollution control permit, the Permittee shall:

- a. Submit to the Director for approval an O&M Plan for each ECS and for each ECS monitoring device that is used pursuant to Maricopa County Air Quality Regulations or an air pollution control permit. The O&M Plan(s) shall include all of the following information:

[Maricopa County Rule 320 §305.1.a]

- (1) ECS equipment manufacturer name and model designation;
- (2) ECS equipment serial number, or a unique identifier assigned by the owner; and
- (3) Key system operating parameters, such as temperatures, pressures and/or flow rates, necessary to determine the ECS is functioning properly and operating within design parameters, as well as the acceptable operating range, monitoring frequency, and recording method for each operating parameter.
- (4) Descriptions of maintenance procedures that will be performed on each ECS and ECS monitoring device and the frequency of each maintenance procedure.

- b. Provide and maintain, readily available on-site at all times, the approved O&M Plan(s) for each ECS and each ECS monitoring device that is used pursuant to these conditions of this Attachment.

[Maricopa County Rule 316 §305.1.b]

- c. *Install, maintain, and accurately calibrate monitoring devices described in the approved O&M Plan(s). The monitoring devices shall measure pressures, rates of flow, and/or other operating conditions necessary to determine if the control devices are functioning properly.*

[Maricopa County Rule 316 §305.1.c]

[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]

- d. Fully comply with all identified actions and schedules provided in each O&M Plan.

[Maricopa County Rule 316 §305.1.d]

E. Monitoring, Record keeping and Reporting Requirements

1. Opacity

- a. 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]

- b. Opacity observations to measure visible emissions from activities regulated by Sections 301 (excluding truck dumping directly into any screening operation, feed hopper, or crusher), 302 (excluding truck dumping directly into any screening operation, feed hopper, or crusher), and/or 303 of this rule 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), 40 CFR Part 51, Appendix M. The EPA test methods as they exist in the CFR are incorporated by reference in Appendix G of these rules. Emissions shall not exceed the applicable opacity standards described in Section 301, Section 302, and Section 303 of this rule for a period aggregating more than three minutes in any 60-minute period.

[Maricopa County Rule 316 §502.2.a]

2. Operational

The Permittee shall comply with the following requirements. Records shall be retained for five years.

[Maricopa County Rule 316 §501]

- a. Operational information required by this rule shall be kept on-site, in written or electronic format, and in a complete and consistent manner on-site and shall be made available without delay to the Director upon request. Paper or electronic copies of records required by this rule shall be made available to the Director upon request.

[Maricopa County Rule 316 §501.1]

- b. Records of the following process and operational information, as applicable, are required:

[Maricopa County Rule 316 §501.2]

(1) Soil Moisture Testing:

[Maricopa County Rule 316 §501.2.b]

- (a) The date, time, and location for each soil moisture sample collected;
- (b) Results of each soil moisture test; and

(c) Corrective actions taken when soil moisture test results are below the applicable minimum moisture content in Maricopa County Rule 316 § 301.2(c).

(2) The Permittee shall maintain all of the following records in accordance with the approved O&M Plan:

[Maricopa County Rule 316 §501.3]

For Any ECS and Any ECS Monitoring Devices that are Used Under this Rule or Under an Air Pollution Control Permit:

- (a) Periods of time that an approved ECS is operating to comply with the conditions in this permit;
- (b) Periods of time that an approved ECS is not operating;
- (c) Flow rates;
- (d) Pressure drops;
- (e) Other conditions and operating parameters necessary to determine if the approved ECS is functioning properly;
- (f) Results of visual inspections;
- (g) Correction action taken, if necessary; and
- (h) Dates of all service or maintenance related activities for each approved ECS.

3. 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]

4. 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]

F. Permit Shield

Compliance with the conditions of Section II shall be deemed compliance with A.A.C. R18-2-306.01, -306.A.3, -306.A.3.c, -306.A.4, -331.A.3.c, Maricopa County Rule 316 §305.1.b, §305.1.c, §305.1.d, §501, §501.1, §501.2, §501.2.a, §501.2.b, §501.3.a, §502.2.a, Maricopa County Rule 320 §302, §303, and §305.1.a.

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

III. CONCRETE BATCH PLANT REQUIREMENTS

A. Applicability

This Section applies to concrete batching and material handling operations.

B. Particulate Matter and Opacity

1. Emission Limitations/Standards

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

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

2. Air Pollution Control Requirements

The Permittee shall implement the following process controls:

- a. On all dry material storage silo(s), install and operate an overflow warning system/device. [Maricopa County Rule 316 §303.2.a]
- b. On all dry material storage silos installed after June 8, 2005, 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, when loading truck mixed product, the Permittee shall implement one of the following process controls: [Maricopa County Rule 316 §303.2.c]
 - (1) Install and use a rubber fill tube;
 - (2) Install and operate a water spray;
 - (3) Install and operate a properly sized fabric filter baghouse or delivery system;
 - (4) Enclose mixer stations such that no visible emissions occur; or
 - (5) Conduct mixer loading stations in an enclosed process building such that no visible emissions from the building occur during the mixing activities.
- d. On each cement silo filling process/loading operation, the Permittee shall install a pressure control system designed to shut-off cement silo filling

process/loading operation if pressure from delivery truck is excessive, as defined in the approved O&M Plan.

[Maricopa County Rule 316 §303.2.d]

- e. On each dry material storage silo filling process/loading operation installed after November 7, 2018, install a pressure control system designed to shut-off the silo filling process/loading operation if pressure from the delivery truck is excessive, as defined in the approved O&M Plan.

[Maricopa County Rule 316 §303.2.e]

C. Monitoring, Recordkeeping, and Reporting

1. The Permittee shall comply with the following requirements. Records shall be retained for five years.

[Maricopa County Rule 316 §501]

2. Operational information required by this rule shall be kept on-site, in written or electronic format, and in a complete and consistent manner and shall be made available without delay to the Director upon request. Paper or electronic copies of records required by this rule shall be made available to the Director upon request.

[Maricopa County Rule 316 §501.1]

3. General Data

Daily records shall be kept for all days that process equipment is operating. Records shall include all of the following:

[Maricopa County Rule 316 §501.2.a]

- a. Hours of operation;
- b. Type of batch plant (wet, dry, central);
- c. Throughput per day of materials including sand, aggregate, and cement (tons/day);
- d. Volume of concrete produced per day (cubic yards/day) and amount of asphaltic concrete produced per day (tons/day);
- e. Amount of aggregate mined per day (tons/day);
- f. Amount of each nonmetallic mineral and amount of each dry material delivered per day (tons/day or cubic yards/day);
- g. For facilities that assert to be below the thresholds in Conditions V.C.6.a and V.C.6.e(1) of this Attachment, the number of aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks exiting the facility; and
- h. Description of operating condition of process controls as required in Maricopa County Rule 316 § 301.2(d) of this rule.

D. Permit Shield

Compliance with the conditions of Section III shall be deemed compliance with Maricopa County Rule 316 §303.1.a, §303.1.b, §303.2.a, §303.2.b, §303.2.c, §303.2.d, §303.2.e, §501.1, and §501.2.a.

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

IV. INTERNAL COMBUSTION ENGINES

A. Applicability

1. This Section applies to:

- a. Any stationary RICE, including stationary RICE used in cogeneration, with a rated brake horsepower (rated bhp) of greater than 125, if the stationary RICE is not located at a major source of NO_x emissions;
- b. Any stationary RICE, including stationary RICE used in cogeneration, with a rated bhp of more than 50 if the stationary RICE is not located at a major source of NO_x emissions and the maximum aggregated rated bhp of all stationary RICE at the stationary source is more than 125 when all engines with a rated bhp of more than 50 are aggregated;
- c. Any stationary RICE, including stationary RICE used in cogeneration, with a rated brake horsepower (rated bhp) of greater than 50, if the stationary RICE is located at a major source of NO_x emissions; and
- d. Any nonroad engine, with a rated bhp of greater than 125, that is located at a stationary source that emits or has the potential to emit any regulated air pollutant greater than the permitting thresholds defined in Rule 100. For the purpose of this Rule, a nonroad engine is any internal combustion engine that by itself or in or on a piece of equipment is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include but are not limited to, wheels, skids, carrying handles, dollies, trailers, or platforms.

[Rule 324 § 102.1]

2. In addition, a stationary RICE may be subject to New Source Performance Standards (NSPS) in Rule 360.

[Rule 324 § 102.2]

3. In addition, a stationary RICE may be subject to National Emission Standards for Hazardous Air Pollutants (NESHAP) in Rule 370.

[Rule 324 § 102.3]

B. General Requirements

1. Hours of Operating

The permittee shall not operate any emergency engine more the 500 hours per calendar year.

[Rule 324 § 206]

2. Maintenance Requirements

The Permittee shall maintain the stationary RICE in accordance with the manufacturer's written instructions or in accordance with the maintenance schedule provided by the manufacturer's authorized service provider. Alternatively, the Permittee shall conduct preventative maintenance according to the following schedule, including all of the following tuning procedures, if the engine is so equipped, and if such procedures are appropriate to the type of engine:

[Rule 324 § 302]

a. The following maintenance procedures shall be completed no less frequently than every 300 hours of operation (for engines that operate 300 hours per year or more) or at least once every 12 months (for engines that operate less than 300 hours per year):

- (1) Clean the inlet air filter (if so equipped);
- (2) Change oil filter; and
- (3) Change the lubricating oil or conduct an oil analysis to determine Total Base Number, viscosity, and percent water content. The lubricating oil must be replaced within 2 business days after the analytical results are received if any of the following condemning limits are exceeded:
 - (a) Total Base Number is less than 30% of the Total Base Number of the oil when new;
 - (b) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
 - (c) Percent water content (by volume) is greater than 0.5.

[Rule 324 § 302.1]

b. The following maintenance procedures shall be completed no less frequently than every 1,000 hours of operation (for engines that operate 1,000 hours per year or more) or at least once every 12 months (for engines that operate less than 1,000 hours per year):

- (1) Check the inlet air filter and replace as necessary;
- (2) Check all fuel filters and clean as necessary (except cartridge type fuel filters);
- (3) Check cartridge type fuel filters and replace as necessary;
- (4) Check and adjust the intake and exhaust valves;
- (5) Check and adjust the spark plugs (if so equipped);

- (6) Check and adjust the spark timing and dwell or fuel injection timing (if adjustable); and
- (7) Check and adjust the carburetor mixture (if adjustable).

[Rule 324 § 302.2]

c. The following maintenance procedures shall be completed no less frequently than every 3,000 hours of operation (for engines that operate 3,000 hours per year or more) or at least once every 12 months (for engines that operate less than 3,000 hours per year):

- (1) Check spark plugs and ignition points, and replace as necessary (if so equipped);
- (2) Check coolant and change as necessary (if so equipped); and
- (3) Check the exhaust system and repair all leaks and/or restrictions.

[Rule 324 § 302.3]

3. Identical Engine Replacement

[Rule 324 § 305]

An identical replacement engine shall be treated as the original stationary RICE that it replaces for the purposes of compliance.

C. Monitoring, Reporting and Recordkeeping Requirements

[Rule 324 § 502]

1. The Permittee shall maintain a list of stationary RICE that includes all of the following information for each stationary RICE: combustion type (compression ignition, or lean-burn spark-ignition, or rich-burn spark-ignition); manufacturer; model designation, rated bhp, serial number, and the location of each engine at the facility. If the equipment list associated with the current permit includes all of the required information for each stationary RICE located at the facility, this requirement may be fulfilled by keeping a complete copy of the current permit, including the equipment list, in a readily accessible location at the facility where the engines are located, and by providing the equipment list to the Control Officer upon request.

[Rule 324 § 502.1]

2. The Permittee shall maintain records of the monthly and 12-month rolling total hours of operation for each stationary RICE. For emergency engines, the operation records shall also include:

- a. Monthly and annual hours of operation for reliability related activities such as engine readiness, calibration, or maintenance, or to prevent the occurrence of an unsafe condition during electrical system maintenance; and
- b. The number of operating hours for emergency use and an explanation for the emergency use.

[Rule 324 § 502.2]

3. The Permittee shall maintain records of all stationary RICE maintenance (including the date when maintenance was performed and the maintenance procedures that were performed). If the Permittee of a non-emergency engine demonstrates compliance with the requirements in Section 304.1 using the method specified in Section 501.1(d), the maintenance record shall include documentation of the injection timing setting each time maintenance is performed on the stationary RICE. In addition, one of the following documents shall be available at all times at the facility where the stationary RICE is located:
 - a. The manufacturer's written instructions for operation and maintenance of each stationary RICE;
 - b. A written maintenance schedule provided by the manufacturer's authorized service provider; or
 - c. A written maintenance plan indicating which of the tuning procedures listed in Section 302 are applicable to each stationary RICE.

[Rule 324 § 502.3]

4. The Permittee shall maintain records of the type and amount of fuel purchased for use in the stationary RICE (e.g. receipts, pipeline tickets, or bills of lading); and maintain records of the sulfur content of any fuel that is used in the stationary RICE, excluding gasoline. For gasoline, maintain records that the fuel was purchased in the United States.

[Rule 324 § 502.4.a and b]

5. The Permittee shall keep the manufacturer's written instructions for operation and maintenance of the engine available at the facility where the engine is located at all times. If the manufacturer's written instructions are not available, the Permittee shall keep a preventative maintenance plan, indicating which procedures in Section 302 are appropriate to the engine, available at the facility where the engine is located at all times.

[Rule 324 § 502.5]

6. The Permittee shall maintain the following records for each non-road engine:
 - a. Date that each engine is brought to the stationary source; and
 - b. For engines located at a stationary source greater than 14 consecutive days:
 - (1) Make, model, serial number, and rated capacity (bhp hours) of the engine.
 - (2) Date of each instance in which the engine is moved from its existing location, and the reason why the engine was moved; and
 - (3) Fuel type and sulfur content of the fuel.

[Rule 324 § 502.6]

D. Fuel Requirements

The Permittee shall comply with one of the following:

[Rule 324 § 301]

1. Use ultra low sulfur oil, except as provided in Sections 301.1a or 301.1b.
 - a. Engines that are not subject to the 40 CFR 60 Subpart IIII or 40 CFR 63 Subpart ZZZZ may use existing low sulfur oil purchased (or otherwise obtained) prior to November 2, 2016 until depleted.
 - b. Engines that are subject to 40 CFR 60 Subpart IIII or 40 CFR 63 Subpart ZZZZ must also comply with the fuel requirements in the applicable subpart.
[Rule 324 § 301.1]
2. Use any waste derived fuel gas that contains no more than 0.08% sulfur by weight, alone or in combination with other fuels.
[Rule 324 § 301.2]
3. Use gasoline that meets the sulfur standard of 80 ppm as a per-gallon cap.
[Rule 324 § 301.3]
4. Use natural gas, liquefied petroleum gas (LPG), or any alternative fuel that contains no more than 0.05% sulfur by weight, alone or in combination with other fuels.
[Rule 324 § 301.4]

E. Opacity Requirement

[Rule 324 § 303]

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

F. Nitrogen Oxides

1. Emission Limitations and Standards

The Permittee shall comply with the emissions limits as described in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Requirements.

[Rule 324 Tables 1 and 2]

2. Performance Testing Requirement

[Rule 324 § 504]

The Permittee shall conduct performance tests using the test methods listed in Section 503 of Maricopa County Rule 324.

G. Carbon Monoxide

1. Emission Limitations and Standards

The Permittee shall comply with the emissions limits as described in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Requirements.

[Rule 324 Tables 1 and 2]

2. Performance Testing Requirement

[Rule 324 § 504]

The Permittee shall conduct performance tests using the test methods listed in Section 503 of Maricopa County Rule 324.

H. Volatile Organic Compounds

1. Emission Limitations and Standards

The Permittee shall comply with the emissions limits as described in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Requirements.

[Rule 324 Tables 1 and 2]

2. Performance Testing Requirement

[Rule 324 § 504]

The Permittee shall conduct performance tests using the methods listed in Section 503 of Maricopa County Rule 324.

Table 7: Maricopa County Air Pollution Control Regulations Rule 324 (Table 1)

MANUFACTURED OR RECONSTRUCTED	RATED BHP	ENGINE REQUIREMENTS*
Prior to October 22, 2003	250-399	770 ppmvd or 10 g/bhp-hr NO _x or turbocharger with aftercooler/intercooler or 4-degree injection timing retard
Prior to October 22, 2003	More than 399	550 ppmvd or 7.2 g/bhp-hr. NO _x or turbocharger with aftercooler/intercooler or 4-degree injection timing retard
On or after October 22, 2003	More than 250	530 ppmvd or 6.9 g/bhp-hr. NO _x or; 1,000 ppmvd CO; 0.40 g/bhp-hr PM

* ppmvd emission standards are corrected to 15% oxygen.

Table 8: Maricopa County Air Pollution Control Regulations Rule 324 (Table 2)

MANUFACTURED OR RECONSTRUCTED	RATED BHP	NITROGEN OXIDES (NO _x)**	VOLATILE ORGANIC COMPOUNDS (VOCs)**	CARBON MONOXIDE (CO)**
Lean-Burn Engines				
Prior to October 22, 2003	>250	280 ppmvd or 4.0 g/bhp-hr	800 ppmvd or 5.0 g/bhp-hr	4,500 ppmvd or three-way catalyst*
On or after October 22, 2003	>250	110 ppmvd or 1.5 g/bhp-hr	Not Applicable	4,500 ppmvd
Rich-Burn Engines				

MANUFACTURED OR RECONSTRUCTED	RATED BHP	NITROGEN OXIDES (NO _x)**	VOLATILE ORGANIC COMPOUNDS (VOCs)**	CARBON MONOXIDE (CO)**
Prior to October 22, 2003	>250	280 ppmvd or 4.0 g/bhp-hr or three-way catalyst*	800 ppmvd or 5.0 g/bhp-hr or three-way catalyst*	4,500 ppmvd or three-way catalyst*
On or after October 22, 2003	>250	20 ppmvd or 0.3 g/bhp-hr or three-way catalyst*	Not Applicable	4,500 ppmvd

* 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 at least 50% control efficiency for VOC for those engines fueled by gasoline.

** ppmvd emission standards are corrected to 15% oxygen.

V. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Emission Limitations

An owner, operator, or person subject to this rule shall comply with the following limitations at all times and in all areas of a site, unless otherwise specified.

[Maricopa County Rule 316 §306]

1. 20% Opacity Limitation

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 of the Fugitive Dust Test Methods of the Maricopa County Rule.

[Maricopa County Rule 316 §306.1]

2. Visible Emission Limitation Beyond Property Line

The Permittee shall not cause or allow to be discharged visible emissions of particulate matter, including fugitive dust beyond the property line within which the emissions are generated.

[Maricopa County Rule 316 §306.2]

3. Wind-Blown Dust

The fugitive dust emission limitations described Conditions V.B.1 and V.B.2 shall not apply to wind-blown dust, if the Permittee meets the following conditions:

- a. Has implemented the fugitive dust control measures described in Condition V.C below as applicable, and the fugitive dust emissions cannot be prevented by better application, operation, or maintenance of these fugitive dust control measures

[Maricopa County Rule 316 §306.3.a]

b. Has compiled and retained records, in accordance with Condition V.D.5 below; and

[Maricopa County Rule 316 §306.3.b]

c. Has implemented the following control measures, as applicable:

[Maricopa County Rule 316 §306.3.c]

(1) For an active operation, implement one of the following fugitive dust control measures;

(a) Cease operation of any equipment or activity that may contribute to an exceedance of the fugitive dust emission limitations described in Condition V.B.1 of this Attachment; or

(b) Apply water or other suitable dust suppressant to keep the soil visibly moist.

[Maricopa County Rule 316 §306.3.c(1)]

(2) For an inactive open storage pile, implement one of the following fugitive dust control measures:

(a) Maintain a soil crust by applying water or other suitable dust suppressant or by implementing another fugitive dust control measure, in sufficient quantities to meet the stabilization standards described in Condition V.E.2.b below 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.

[Maricopa County Rule 316 §306.3.c(2)]

(3) For an inactive-disturbed surface area, implement one of the following fugitive dust control measures:

(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 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.

[Maricopa County Rule 316 §306.3.c(3)]

4. Stabilization Standards for Unpaved Roads and Unpaved Parking Lots and Unpaved Staging Areas:

The Permittee shall not allow silt loading equal to or greater than 0.33 oz/ft² for unpaved roads, unpaved parking lots, and unpaved staging areas. However, if silt loading is equal to or greater than 0.33 oz/ft², the Permittee shall not allow:

- a. Silt content to exceed 6% for unpaved roads; or
- b. Silt content to exceed 8% for unpaved parking lots and staging areas.
[Maricopa County Rule 316 §306.4]

5. Stabilization Standards for all other areas

The Permittee shall stabilize all areas of the facility, excluding unpaved roads, unpaved parking lots, and unpaved staging areas, in order to meet at least one of the standards listed below, as applicable:

- a. Maintain visible soil moisture;
- b. Maintain a soil crust;
- c. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;
- d. 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%;
- e. 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%;
- f. 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;
- g. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- h. Comply with a standard of an alternative test method, upon obtaining the written approval from the Director and the Administrator.
- i. If a facility contains more than one type of visibly distinguishable stabilization characteristics, soil textures, vegetation, or other characteristics, each representative surface area will be evaluated separately for stability, in accordance with the appropriate test methods described in Condition V.E.2.b below and in Appendix C-Fugitive Dust Test Methods of these rules

[Maricopa County Rule 316 §306.5.a]

C. Air Pollution Control Requirements

The Permittee shall implement the fugitive dust control measures described in Conditions V.C.1 through V.C.12 below, as applicable. Any fugitive dust control measure that is implemented must achieve the applicable standard(s) described in Condition V.B above, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in this Section.

The Permittee submit a request to the Director and the Administrator 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 prescribed in this Section.

[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 Condition V.B.1 through V.B.5 of this Attachment. For the purpose of this Section, open storage pile(s) and material handling does not include berms that are installed to comply with 30 CFR 56.93000. However, such berms shall be installed and maintained in compliance with Conditions V.B.1, V.B.2, and V.B.5 of this Attachment.

[Maricopa County Rule 316 §307.1]

a. Prior to, and/or while conducting loading, unloading, and excavating operations, implement one of the following fugitive dust control measures:

- (1) Spray material with water, as necessary; or
- (2) Spray material with a dust suppressant other than water, as necessary.
[Maricopa County Rule 316 §307.1.a]

b. When not conducting loading, unloading, and excavating operations, implement one of the following fugitive dust control measures:

[Maricopa County Rule 316 §307.1.b]

- (1) Spray material with water, as necessary;
- (2) Maintain a 1.5% or more soil moisture content of the open storage pile(s);
- (3) Locate open storage pile(s) in a pit/in the bottom of a pit;
- (4) 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;
- (5) 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%;
- (6) Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings; or
- (7) Maintain a visible crust.

- c. When installing new open storage pile(s), the Permittee shall implement all of the following fugitive dust control measures:
- (1) Install the open storage pile(s) 25 feet or more from the property line. The Permittee may be allowed to install the open storage pile(s) less than 25 feet from the property line, if the Permittee can demonstrate to the Director that there is not adequate space to install the open storage pile(s) 25 feet or more from the property line. Such demonstration shall be made in writing and approved by the Director; and
 - (2) Limit the height of the open storage pile(s) to less than 45 feet.
[Maricopa County Rule 316 §307.1.c]
- d. For any open storage pile(s) that are more than eight feet high and are not covered, the Permittee shall install, use, and maintain a water truck or other method that is capable of completely wetting the surfaces of the open storage pile(s).
[Maricopa County Rule 316 §307.1.d]

2. Unpaved Parking Lots, Staging Areas, and Areas 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.C.3 or V.C.4 of this Attachment where loaders, support equipment, and vehicles operate.

- a. Apply and maintain water;
- b. Apply and maintain a dust suppressant, other than water; or
- c. Apply and maintain a layer of washed gravel that is at least six inches deep.
[Maricopa County Rule 316 §307.2]

3. Haul/Access Roads that Are Not in Permanent Areas of a Facility

- a. The Permittee shall implement one of the following fugitive dust control measures, as applicable, before engaging in the use of haul/access roads. Compliance with the provisions of Condition V.C.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).
- (1) Install and maintain bumps, humps, or dips for speed control and apply water, as necessary;
 - (2) Limit vehicle speeds and apply water, as necessary;
 - (3) Install and maintain a paved surface;
 - (4) Apply and maintain a layer of washed gravel that is six inches deep;
 - (5) Apply a dust suppressant, other than water; or

(6) Install and maintain a cohesive hard surface.

[Maricopa County Rule 316 §307.3.a]

b. For a new facility, if it is determined that none of the fugitive dust control measures described in V.C.3.a can be technically and feasibly implemented, then the Permittee shall maintain a distance of 25 feet or more between the property line and haul/access roads associated with the new facility. Such determination shall be made and approved in writing by the Director and the Administrator and shall be approved in the Dust Control Plan.

[Maricopa County Rule 316 §307.3.b]

4. On-Site Traffic

a. The Permittee shall require all batch trucks and delivery trucks to remain on 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 delivery trucks to exit the facility/operation only through exits that comply with the trackout control device requirements in Condition V.C.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. Hauling and/or Transporting Bulk Material

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

(1) Load all haul trucks such that the freeboard is not less than three inches;

(2) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and

(3) Cover haul trucks with a tarp or other suitable closure.

[Maricopa County Rule 316 §307.5.a]

b. When hauling and/or transporting bulk material within the boundaries of the facility, the Permittee shall implement one of the following control measures:

(1) Limit vehicle speed to 15 miles per hour or less while traveling within the facility;

(2) Apply water to the top of the load; or

- (3) Cover haul trucks with a tarp or other suitable closure.
[Maricopa County Rule 316 §307.5.b]

c. When hauling and/or transporting bulk material within the boundaries of a facility and crossing or accessing an area accessible to the public, the Permittee shall implement all of the following control measures:

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

6. Trackout Control Devices, Trackout, and Spillage

a. Trackout Control Devices for Facilities with 60 or More Trucks Exiting on Any Day:

The Permittee shall install, maintain, and use a rumble grate and wheel washer, in accordance with all of the following conditions, as applicable at a permanent facility with 60 or more aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks exiting a facility on any day onto paved areas accessible to the public

- (1) The Permittee shall locate a rumble grate within 10 feet from a wheel washer.

[Maricopa County Rule 316 §307.6.a(1)]

(a) The rumble grate and wheel washer shall be located no less than 30 feet prior to each exit that leads to a paved area accessible to the public and that is used by aggregate trucks, mixer trucks, delivery trucks, and/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 can demonstrate 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 vehicle wash and/or a cosmetic wash may be substituted for a wheel washer, provided such vehicle wash and/or cosmetic wash has at least 40 pounds per square inch (psi) water spray from the nozzle, 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 criteria Conditions V.C.6.a(1) through V.C.6.a(6), and is approved in the Dust Control Plan for the facility.

- (2) The Permittee shall ensure that all aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks exit the facility via the rumble grate first and then the wheel washer.
[Maricopa County Rule 316 §307.6.a(2)]
- (3) The Permittee shall post a sign by the rumble grate and wheel washer to designate the speed limit as 5 miles per hour.
[Maricopa County Rule 316 §307.6.a(3)]
- (4) The Permittee shall pave the roads from the rumble grate and wheel washer to the facility exits leading to paved areas accessible to the public.
[Maricopa County Rule 316 §307.6.a(4)]
- (5) The Permittee shall ensure that all aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks remain on the paved roads between the rumble grate and wheel washer and the facility exits leading paved areas accessible to the public.
[Maricopa County Rule 316 §307.6.a(5)]
- (6) An owner, operator, or person subject to this rule shall have a water pressure gauge available on-site to measure nozzle pressure if a vehicle wash and/or cosmetic wash is substituted for a wheel washer.
[Maricopa County Rule 316 §307.6.a(6)]

b. Trackout Control Devices for Facilities with Less than 60 Trucks Exiting on Any Day:

A Permittee not subject to Condition V.C.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:

- (1) 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 area accessible to the public and that is used by aggregate trucks, mixer trucks, delivery trucks, and/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.

- (2) The Permittee shall ensure that all aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks exit the facility via a rumble grate, wheel washer, or truck washer.
- (3) 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.
- (4) If haul/access roads/internal roads are unpaved between the rumble grate, wheel washer, or truck washer and the facility exits leading to 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 areas accessible to the public. The gravel pad shall be flushed with water or completely replaced as necessary to comply with the trackout threshold described in Condition V.C.6.d.

[Maricopa County Rule 316 §307.6.b]

c. Exemptions from Trackout Control Device Requirements

- (1) The Permittee shall not be required to install, maintain, and use a wheel washer at a facility that has all paved 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.

[Maricopa County Rule 316 §307.6.c(1)]

- (2) The Permittee shall not be required to install, maintain, and use a wheel washer at a facility that 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 and a gravel pad on all unpaved roads leading to the facility exits leading to paved areas accessible to the public.

[Maricopa County Rule 316 §307.6.c(2)]

- (3) The Permittee shall not be required to install, maintain, and use a wheel washer at a facility that has a minimum of ¼ mile paved internal roads leading from a rumble grate to the facility exits leading to paved areas accessible to the public.

[Maricopa County Rule 316 §307.6.c(3)]

- (4) An owner, operator, or person subject to this rule shall not be required to install, maintain, and use a wheel washer at a facility that meets the definition of infrequent operations, as defined in Section 238 of MCAQD Rule 316. An owner, operator, or person subject to this rule shall install, maintain, and use a rumble grate and a gravel pad. The gravel pad shall be installed for a distance of no less than 100 feet from the rumble grate to the facility exits leading to paved areas accessible to the public. An owner, operator, or person subject to this rule shall keep records in accordance with Section 500 of this rule, as applicable. An owner, operator, or person subject to this rule shall notify the Director in the event that the facility will operate more than 52 days per year based on the average rolling 3-year period after June 8, 2005

and the owner, operator, or person subject to this rule shall comply with Condition V.C.6 of this Attachment, as applicable.

[Maricopa County Rule 316 §307.6.c(4)]

- (5) An owner, operator, or person subject to this rule shall not be required to install, maintain, or use a wheel washer, rumble grate, or other trackout control device specified in Conditions V.C.6.a through V.C.6.b of this Attachment, where the only possible fugitive dust release from the facility may be generated from a process that is otherwise vented or controlled through an approved emission control system and provided the following controls are in place:

[Maricopa County Rule 316 §307.6.c(5)]

- (a) A paved surface is installed and maintained on all internal travel, parking, and vehicle maneuvering areas;
- (b) All emissions from processes that create dust are captured by an approved emission control system operated in accordance with Section 305.1 of this rule;
- (c) All dry material storage silos are equipped with an overflow warning system/device and a pressure control system which prevents spillage during silo loading;
- (d) All material from rail car bottom dumping, for rail car unloading, is contained in areas where no vehicle use or maneuvering is permitted; and
- (e) All material transfer operations are conducted in a manner that prevents spillage of material to the ground.

d. Trackout Distance

- (1) 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.

[Maricopa County Rule 316 §307.6.d(1)]

- (2) The Permittee shall clean up all other trackout at the end of the workday.

[Maricopa County Rule 316 §307.6.d(2)]

e. Cleaning Paved Roads Identified in the Dust Control Plan

The Permittee shall clean all paved roads identified in the Dust Control Plan for a facility in accordance with all of the following as applicable:

[Maricopa County Rule 316 §307.6.e]

- (1) If the Permittee at a facility with 60 or more aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks exiting the facility on any day shall sweep the paved roads with a street sweeper by the end of each production work shift, if there is evidence of dirt and/or other

bulk material extending a cumulative distance of 12 linear feet or more on any paved road.

- (2) The Permittee at a facility with less than 60 aggregate trucks, mixer trucks, delivery trucks, and/or batch trucks exiting the facility on any day shall sweep the paved roads with a street sweeper by the end of every other work day, if there is evidence of dirt and/or other bulk material extending a cumulative distance of 12 linear feet or more on any paved road. On the days that paved roads are not swept, if there is evidence of dirt and/or other bulk material extending a cumulative distance of 12 linear feet or more on any paved road, The Permittee shall remove the dirt and/or other bulk material from the paved internal road by the end of the work day.
- (3) 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.
- (4) The Permittee shall use South Coast Air Quality Management Rule 1186 certified street sweepers to sweep paved roads at a new facility.

7. Weed Abatement by Discing or Blading

The Permittee shall implement all of the following fugitive dust control measures before, during, and after weed abatement by discing or blading:

[Maricopa County Rule 316 §307.7]

- a. Before weed abatement by discing or blading occurs, apply water;
- b. While weed abatement by discing or blading is occurring, apply water; and
- c. After weed abatement by discing or blading occurs, pave, apply gravel, apply water, apply a suitable dust suppressant other than water, or establish vegetative ground cover.

8. Demolition

The Permittee shall implement all of the following fugitive dust control measures for demolition activities:

- a. Apply water to demolition debris immediately following demolition activity; and
- b. After demolition, apply water to all soil surfaces to establish a visible crust and to prevent wind erosion.

[Maricopa County Rule 316 §307.8]

9. Blasting Operations

The Permittee shall pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate when conducting blasting operations.

[Maricopa County Rule 316 §307.9]

10. Other Dust-Generating Operations

The Permittee shall implement the following control measures, as applicable, when conducting dust-generating operations not specifically listed in Condition V.C.1 through V.C.9 above, or when a dust-generating operation is finished for a period of 30 days or longer:

a. Before disturbed surface areas are created, implement one of the following control measures:

- (1) Pre-water site to depth of cuts, allowing time for penetration; or
- (2) Phase work to reduce the amount of disturbed surface areas at any one time.

[Maricopa County Rule 316 §307.10.a]

b. While disturbed surface areas are being created, implement one of the following control measures:

- (1) Apply water or other suitable dust suppressant other than water to keep the soil visibly moist;
- (2) Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Director and the Administrator. For areas that have optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Director and the Administrator, maintain at least 70% of the optimum soil moisture content; or
- (3) Implement control measures described in Condition V.C.10.b(1) or Condition V.C.10.b(2) of this attachment and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of wind-blown material leaving a site.

[Maricopa County Rule 316 §307.10.b]

c. When a dust-generating operation is finished for a period of 30 days or longer, the owner, operator, or person subject to this rule shall implement one of the following control measures on the disturbed surface area within ten days after cessation nonmetallic mineral processing, related operations, or any other dust generating operations.

- (1) Pave, apply gravel, or apply a suitable dust suppressant other than water;
- (2) Establish vegetative ground cover;

- (3) Implement control measures described in Condition V.C.10.c(1) or Condition V.C.10.c(2) of this attachment and restrict vehicle access to the area;
- (4) Apply water and prevent access by fences, ditches, vegetation, berms, or other suitable barrier or means sufficient to prevent vehicle access as approved by the Director;
- (5) Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.

[Maricopa County Rule 316 §307.10.c]

11. Nighttime Operations

The Permittee shall implement, maintain, and use fugitive dust control measures between sunset and sunrise so as to meet all of the applicable requirements in this rule, and shall identify in the Dust Control Plan such fugitive dust control measures.

[Maricopa County Rule 316 §307.11]

12. Soil Moisture

If water is the chosen control measure in an approved Dust Control Plan, the Permittee shall operate a water application system (e.g. a water truck) at the facility while conducting any operations that have the potential to generate fugitive dust emissions, unless a visible crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.

[Maricopa County Rule 316 §307.12]

D. 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 or with five acres or more disturbed surface area subject to a permit, whichever is greater, shall have in place a Fugitive Dust Control Technician, who shall meet all of the following qualifications:

- a. Be authorized by the Permittee to have full authority to ensure that fugitive dust control measures are implemented on-site and 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
- b. Be trained in accordance with the Comprehensive Dust Control Training Class conducted or approved by the Director, successfully complete, 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 §309.1]

[Maricopa County Rule 316 §309.2]

- c. Be authorized by the Permittee to install, maintain, and use fugitive dust control measures, deploy resources, and shutdown or modify equipment or operations 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. Basic Dust Control Training Class

- a. At least once every three years, the plant manager, foreman, 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 operations, shall successfully complete a Basic Dust Control Training Class conducted or approved by the Director.
[Maricopa County Rule 316 §310.1]
- b. 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]
- c. Completion of the Comprehensive Dust Control Training Class, as required in Condition V.D.2 of this Attachment, shall satisfy the requirement of Section IV of this Attachment.
[Maricopa County Rule 316 §310.3]
- d. For water truck drivers hired on or after November 7, 2018, basic training is required within 60 days from the date of hire unless such time period is extended by the Director, upon written request, for good cause.
[Maricopa County Rule 316 §310.4]

3. 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]

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

e. If the opacity of the plume exceeds 20%, then the Permittee shall do the following:
[A.A.C. R18-2-306.A.3]

- (1) Adjust or repair the controls or equipment to reduce opacity to below 20%; and
- (2) Report it as an excess emission under Section XII.A of Attachment "A".

4. Dust Control Plan

[Maricopa County Rule 316 §311.1]

a. The Permittee shall submit, to the Director, a Dust Control Plan that includes, at a minimum, the following information:

- (1) Name(s), address(es), and phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation.
- (2) Equipment associated with any process fugitive emissions to be implemented, in order to comply with Maricopa County Rule 316 § 301, 302, and 303.
- (3) Fugitive dust control measures to be implemented, in order to comply with Maricopa County Rule 316 §305, 306, and 307.
- (4) Appropriate control measures, or a combination thereof, for every actual and potential source of fugitive dust; and
- (5) Fugitive dust control measures to be implemented for other affected operations not identified in this rule, as applicable.

- (6) Installation date of trackout control device, if applicable;
- (7) Dust suppressants to be applied, including all of the following product specifications or label instructions for approved usage:
 - (a) Method, frequency, and intensity of application;
 - (b) Type, number, and capacity of application equipment; and
 - (c) Information on environmental impacts and approvals or certifications related to appropriate and safe use for ground application.
- (8) Operation and maintenance procedures for process controls and fugitive dust control measures, including but not limited to, gravel pads, wheel washers, truck washers, rumble grates, watering systems, and street sweepers, that are used to comply with this rule or an air pollution control permit.
- (9) A drawing, on 8½" x 11" paper, that shows all of the following information:
 - (a) Property boundaries and project site boundaries with linear dimensions;
 - (b) Location, linear dimensions, and specific surfaces treatment(s) and/or control measures utilized (i.e., install and maintain a paved surface or a cohesive hard surface) for staging areas, open storage piles, haul/access roads, parking areas, and permanent areas of the facility;
 - (c) Location and type of trackout control device, if applicable;
 - (d) Nearest public roads;
 - (e) North arrow;
 - (f) Planned exit locations onto areas accessible to the public; and
 - (g) Unpaved parking lot(s).
- (10) The method that will be used for soil moisture testing: ASTM C566-97 (2004) "Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying" or Speedy Moisture Meter.
- (11) A process diagram that identifies the progression of material containing aggregate material less than 0.25 inch in diameter through the process and that includes all of the following information:
 - (a) Identification of all screen outlets of aggregate material less than 0.25 inch in diameter;

- (b) Identification of all crusher outlets of aggregate material less than 0.25 inch in diameter;
 - (c) Identification of all stacker points of aggregate material less than 0.25 inch in diameter;
 - (d) Identification of sample points for soil moisture tests required by Section 312 of this rule; and
 - (e) Identification of the applicable minimum soil moisture content required by Section 301.2(c) of this rule for each sample point for soil moisture tests.
- b. The Permittee shall submit to the Director a revised Dust Control Plan at each of the following times:
[Maricopa County Rule 316 §311.2]
- (1) At the time such that the Permittee submits an application for an air pollution control permit to the Director;
 - (2) Prior to commencing dust generating operations, nonmetallic mineral processing, or any related operations in areas of a facility that were not previously identified in the approved Dust Control Plan;
 - (3) Prior to installing, maintaining, or using new roads (excluding new roads within a pit), new parking areas, or new staging areas that were not previously identified in the approved Dust Control Plan;
 - (4) Prior to modifying any dust control measures specified in the approved Dust Control Plan;
 - (5) Prior to implementing changes to the soil moisture testing protocol in the approved Dust Control Plan, except as allowed in Maricopa County Rule 316 §312; and
 - (6) Prior to commencing construction or demolition projects that were not previously described in the approved Dust Control Plan
- c. 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 IV of this Attachment.
[Maricopa County Rule 316 §311.3]
- d. The Director shall provide written notification to the owner, operator, or person subject to this rule, if the Director determines any of the following:
[Maricopa County Rule 316 §311.4]
- (1) That a Dust Control Plan is incomplete;
 - (2) That the Dust Control Plan is conditionally approved; or

- (3) That an approved Dust Control Plan has been followed, yet fugitive dust emissions still exceed the standards of this rule and, therefore, a revised Dust Control Plan is required.
- e. The Permittee who receives a notice as described in Condition V.D.4.b of this Attachment, 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 written request, for good cause. During the time that the Permittee is preparing revisions to the Dust Control Plan, the Permittee shall still comply with all requirements of this rule
[Maricopa County Rule 316 §311.5]
- f. The Permittee shall keep a complete copy of the approved Dust Control Plan on-site at all times.
[Maricopa County Rule 316 §311.6]
- g. The Permittee shall make available the approved Dust Control Plan to all contractors and subcontractors at a facility who are engaged in nonmetallic mineral processing or related operations that are subject to this rule.
[Maricopa County Rule 316 §311.7]

5. 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 any activity capable of generating fugitive dust is conducted at the facility. Self-inspection records shall include daily inspections for crusted or damp soil, trackout conditions and clean-up measures, daily water usage for dust control measures, and dust suppressant application. Such written records shall also include the following information.

[Maricopa County Rule 316 §501.4]

- a. Method, frequency, and intensity of application or implementation of the control measures;
- b. Method, frequency, and amount of water application to the site;
- c. Street sweeping frequency;
- d. Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps;
- e. Types and results of test methods conducted;
- f. If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;
- g. List of subcontractors' names and registration numbers, if applicable, updated when changes are made; and

- h. Names of employee(s) who successfully completed dust control training class(es) required by Conditions V.D.1 and V.D.2 of this Attachment, and the date of the class(es) that such employee(s) successfully completed.

6. Basic Dust Control Training Class Records

The Permittee shall compile, maintain, and retain written records for each employee subject to Condition V.D.2 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]

E. 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. Compliance Determination For Emissions And Controls That Are Regulated By Maricopa County Rule 316 §306

To determine compliance with the fugitive dust emission limitations described in the stabilization standards described in Section V.B 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

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

- (2) 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.

ASTM C566-97 (2004) "Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying".

[Maricopa County Rule 316 §504]

b. Stabilization Standards Test Methods

The stabilization standards described in Section V.B of this Attachment shall be determined by using the following test methods in accordance with Appendix C-Fugitive Dust Test Methods of these rules:

[Maricopa County Rule 316 §505]

- (1) 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%).

- (2) Appendix C, Section 2.3 (Test Methods for Stabilization-Soil Crust Determination - The Drop Ball Test) of the Maricopa County Rules for soil crust.
- (3) Appendix C, Section 2.4 (Test Methods for Stabilization-Determination of Threshold Friction Velocity (TFV) Sieving Field Procedure) of the Maricopa County Rules for TFV corrected for non-erodible elements of 100 cm/second or higher.
- (4) Appendix C, Section 2.5 (Test Methods For Stabilization-Determination Of Flat Vegetative Cover) of the Maricopa County Rules for flat vegetation 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%.
- (5) Appendix C, Section 2.6 (Test Methods for Stabilization-Determination of Standing Vegetative Cover) of the Maricopa County Rules for standing vegetation cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%.
- (6) Appendix C, Section 2.6 (Test Methods For Stabilization-Determination Of Standing Vegetative Cover) of the Maricopa County Rules for standing vegetation 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.
- (7) 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.
- (8) An alternative test method approved in writing by the Director and the Administrator of the EPA.

F. 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)."

G. Permit Shield

Compliance with the conditions of Section IV shall be deemed compliance with A.A.C. R18-2-306.A.3, -312, Maricopa County Rule 316 §306, §307, §308, §309, §310, §311, §501.4, §501.5, §502.2, §503, §504, and §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:

[Maricopa County Rule 312 §103]

- 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

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 Condition 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

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

[Maricopa County Rule 312 §302]

- a. Wet abrasive blasting,
- b. Vacuum blasting, or
- c. Dry abrasive blasting, provided that all of the following conditions are met:
 - (1) Perform only on a metal substrate.
 - (2) Use only certified abrasive for dry unconfined blasting.
 - (3) Blast only paint that is lead free (i.e. the lead content is less than 0.1 percent).
 - (4) Perform the abrasive blasting operation directed away from unpaved surfaces.
 - (5) 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

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 and/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 0 of this Attachment:

[Maricopa County Rule 312 §304]

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

[Maricopa County Rule 312 §304.1]

 - (1) The Permittee shall provide and maintain, readily 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.5.b of this Attachment or to an air pollution control permit.

- (2) 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.5 of this Attachment. If the O&M plan has not been filed, any owner or operator employing an approved existing ECS on the effective date of this rule shall by December 18, 2003 have an O&M plan filed with the Director.
- (3) 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 Section 0 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

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 Section 0 of this Attachment regarding work practices.

[Maricopa County Rule 312 §308.1]

b. Confined Blasting

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

[Maricopa County Rule 312 §308.2]

10. Recordkeeping And Reporting

At a minimum, the Permittee subject to this Condition shall keep the following records onsite, that are applicable to all abrasive blasting operations.

[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]

- (1) A list of the blasting equipment,
- (2) The description of the type of blasting as confined, unconfined, sand, wet, or other,
- (3) The locations of the blasting equipment or specify if the equipment is portable,
- (4) A description of the ECS associated with the blasting operations,
- (5) The days of the week blasting occurs, and
- (6) 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]

- (1) The date the blasting occurs,
- (2) The blasting equipment that is operating,
- (3) A description of the type of blasting, and
- (4) 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 this Condition 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 must 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 §506.1 through Maricopa County Rule 312 §506.7. 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]

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

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.

[Maricopa County Rule 315 §301.1]

(1) 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.

[Maricopa County Rule 315 §301.1.a]

(2) 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 and/or within two feet of any open top of the enclosure.

[Maricopa County Rule 315 §301.1.b]

b. Equipment Operated With Forced Air Exhaust Vented Directly Outside

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.

[Maricopa County Rule 315 §301.2]

2. Exemptions

The controls required in Section VI.B.1 of this Attachment shall not apply:

[Maricopa County Rule 315 §302]

- 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.

C. Permit Shield

Compliance with the conditions of Section 0 shall be deemed compliance with Maricopa County Rule 312 §103, §301, §302, §303, §304, §305, §306, §307, §308, §501, §502, §503, §505, 315 §101. §301.1. and §302.

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

ATTACHMENT "D": ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE PIMA COUNTY

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.

[Pima County Code 17.16.010.A-B]

II. FACILITY WIDE REQUIREMENTS

A. General Requirements

1. Fuel Requirements

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.

[Pima County Code 17.16.010.C]

2. General Control Standards

a. The Permittee shall not cause or permit the planning, construction, installation, erection, modification, use or operation of an emission source which will cause or contribute to a violation of a performance standard in Title 17 of the Pima County Code.

[Pima County Code 17.16.020.A]

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

[Pima County Code 17.16.020.B]

3. Odor Limiting Standard

The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under their control in such quantities or concentrations as to cause air pollution.

[Pima County Code 17.16.030]

B. Visible Emission Standards

1. Standards and Applicability (Includes NESHAP)

a. The Permittee shall not cause or permit the effluent from a single emission point, multiple emission point, or fugitive emissions source to have an average optical density equal to or greater than the opacity limiting standards specified in Table 9 of this Attachment, or as otherwise specified in this permit, subject to the following provisions:

[Pima County Code 17.16.040.A]

(1) 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 their certification, or by an approved and precisely calibrated in-stack monitoring instrument.

[Pima County Code 17.16.040.A.1]

(2) 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 9. 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.

[Pima County Code 17.16.040.A.2]

(3) The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.

[Pima County Code 17.16.040.A.3]

b. 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.

[Pima County Code 17.16.040.B]

Table 9: 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 ten 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.

[Pima County Code 17.16.040]

2. Visibility Limiting Standard

- a. 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.
[Pima County Code 17.16.050.A]
- b. 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:
- (1) 20 percent for such non-point sources in Eastern Pima County, east of the eastern boundary of the Tohono O'Odham Reservations.
 - (2) 40 percent for such non-point sources in all other areas of Pima County.
[Pima County Code 17.16.050.B]
- c. Open fires permitted according to Chapter 17.14 of the Pima County Regulations are exempt from the requirements of this Section.
[Pima County Code 17.16.050.C]
- d. 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.
[Pima County Code 17.16.050.D]
- (1) Sources required to obtain an air quality permit under ARS § 49-426, § 49-480 or Rule 17.14.040 of the Pima County Regulations may request to have the actions constituting reasonably necessary and feasible precautions approved and included as permit conditions.
[Pima County Code 17.16.050.D.1]
 - (2) Condition II.B.2.d 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.
[Pima County Code 17.16.050.D.2]
 - (3) Condition II.B.2.d of this Attachment shall not apply to the generation of airborne particulate matter from undisturbed land.
[Pima County Code 17.16.050.D.3]

C. Permit Shield

Compliance with the conditions of Section II shall be deemed compliance with Pima County Code 17.16.010.C, .020.A, .020.B, .030, .040.A, .040.A.1, .040.A.2, .040.A.3, .040.B, .050.A, .050.B, .050.C, .050.D, .050.D.1, .050.D.2, and .050.D.3

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

III. CONCRETE BATCH PLANT REQUIREMENTS

A. Emission Limitations

Fugitive emissions from concrete batch plants shall be controlled in accordance with Section IV of this Attachment.

[P.C.C. § 17.16.380]

B. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with P.C.C. § 17.16.380.

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

IV. FUGITIVE DUST REQUIREMENTS

A. Standards Of Performance For Concrete Batch Plants

Fugitive emissions from concrete batch plants shall be controlled in accordance with Condition IV.A.1 through Condition IV.A.5.b.

[Pima County Code 17.16.380]

1. Motor Vehicle Operations

The Permittee shall not cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum 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.

[Pima County Code 17.16.070.A]

2. Vacant Lots and Open Spaces

a. The Permittee shall not cause, suffer, allow, or permit a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a 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, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept to a minimum 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.

[Pima County Code 17.16.080.A]

b. 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.

[Pima County Code 17.16.080.B]

c. No vacant lot, parking area, sales lot, or other open urban area shall be used by motor vehicles in such a manner that visible dust emissions induced by vehicular traffic on the area causes visible emissions of airborne dust to diffuse beyond the property lines within which the emissions become.

[Pima County Code 17.16.080.C]

3. Roads and Streets

a. The Permittee shall not cause, suffer, allow or permit the use, repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust suppressants, wetting down, detouring or by other reasonable means.

[Pima County Code 17.16.090.A]

b. Dust emissions from the construction phase of a new road must be minimized by applying the same measures specified in Condition IV.A of this Attachment.

[Pima County Code 17.16.090.B]

c. 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.

[Pima County Code 17.16.090.C]

d. 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 Condition II.B.2 of this Attachment.

[Pima County Code 17.16.090.D]

e. 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.

[Pima County Code 17.16.090.E]

f. The surfacing of roadways with asbestos tailings is prohibited.

[Pima County Code 17.16.090.F]

- g. No person shall cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions, such as wetting, applying dust suppressants, or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.
[Pima County Code 17.16.090.G]

4. Particulate Materials

- a. The Permittee shall not cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne
[Pima County Code 17.16.100.A]
- b. Dust emissions from construction activity shall be effectively controlled by applying adequate amounts of water or other equivalently effective dust controls.
[Pima County Code 17.16.100.B]
- c. 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.
[Pima County Code 17.16.100.C]
- d. 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.
[Pima County Code 17.16.100.D]

5. Storage Piles

- a. The Permittee shall not cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne.
[Pima County Code 17.16.110.A]
- b. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to minimize and control to ensure compliance Condition III.B.2 of this Attachment.
[Pima County Code 17.16.110.B]

B. Fugitive Dust Producing Activities

1. The Permittee is responsible for controlling 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.
[Pima County Code 17.16.060.A]
 - a. Until the area becomes permanently stabilized by paving, landscaping or otherwise, the Permittee shall control dust emissions by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant.
[Pima County Code 17.16.060.A.1]
 - b. 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 III.B.2 of this Attachment
[Pima County Code 17.16.060.A.2]

C. Monitoring, Recordkeeping, and Reporting Requirements

1. The Permittee shall periodically collect, record, and maintain sufficient information on the emissions operation or activity to assure that the compliance status of the operation or activity with this title can be readily ascertained at any time. The information shall be retained for at least five years.
[Pima County Code 17.24.020.A]
2. Data which may be needed for compliance determinations on batch-operated processes include chemical composition, quantity, time and duration of each charge of raw material feedstocks, types of product and/or waste product, and each burst or continuous flow of emissions; hours of operation, emissions-control device variables such as differential pressures, temperatures, and/or electrical power supplied or energy consumed; narrative description of abnormal process condition, process upsets, and malfunctions; and prevailing meteorological conditions.
[Pima County Code 17.24.020.C]

D. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pima County Code 17.16.060.2, 16.060.A, .060.A.1, .070.A, .080.A, .080.B, .080.C, .090.A, .090.B, .090.C, .090.D, .090.E, .090.F, .090.G, .100.A, .100.B, .100.C, .100.D, .110.A, .110.B, .380, 17.24.020.A, and .020.C

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

ATTACHMENT “E”: ADDITIONAL CONDITIONS FOR OPERATIONS INSIDE PINAL COUNTY

I. APPLICABILITY

- A. While operating 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)]

- B. The provisions of this article are applicable to the following affected facilities: primary rock crushers, secondary rock crushers, tertiary rock crushers, screens, conveyors and conveyor transfer points, stackers, reclaimers, and all gravel or crushed stone processing plants and rock storage piles.

[Pinal County Code §5-5-180]

II. FACILITY WIDE REQUIREMENTS

Air Pollution Control Requirements

- A. Material Containment Requirement

Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalies, 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.

[Pinal Code § 5-24-1030.F]

- B. 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.

[Pinal Code § 5-24-1030.G]

- C. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pinal Code § 5-24-1030.F and G.

III. FUGITIVE EMISSIONS REQUIREMENTS

A. Particulate Matter Emissions

Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance with Chapter 4 of this Code.

[Pinal County Code §5-5-190.D]

1. Emission Limitations/Standards

- a. 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]

- b. The Permittee shall not cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, such as but not limited to all-terrain vehicles, trucks, cars, cycles, bikes, or buggies, without taking reasonable precautions to effectively prevent fugitive dust from becoming air borne.

[Pinal County Code §4-2-040.B]

- c. 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]

- d. The Permittee shall not crush, screen, handle or convey materials or cause, suffer, allow or permit material to be stacked, piled or otherwise stored without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.

[Pinal County Code §4-2-040.E]

- e. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to prevent excessive amounts of particulate matter from becoming airborne. Other reasonable precautions shall be taken, as necessary, to effectively prevent fugitive dust from becoming airborne.

[Pinal County Code §4-2-040.F]

- f. The Permittee shall not cause, suffer, allow or permit transportation of materials likely to give rise to fugitive dust without taking reasonable precautions to prevent fugitive dust from becoming airborne. Earth and other material that is tracked out or transported by trucking and earth moving equipment on paved streets shall be removed by the party or person responsible for such deposits. Removal of earth from paved streets shall not violate the visibility standard in Pinal County Code Chapter 2.

[Pinal County Code §4-2-040.G]

- g. The Permittee shall not cause, suffer, allow, or permit the use, repair, construction or reconstruction of any road or alley without taking every reasonable precaution to effectively prevent fugitive dust from becoming airborne.

[Pinal County Code §4-2-040.I]

- h. The Permittee shall implement the following control measures for blasting operations at a facility:

- (1) If wind gusts are above 25 miles per hour, discontinue/cease blasting;
- (2) Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

[Pinal Code § 4-7-230.N]

2. Visibility Limiting Standard

- a. Sources subject to §4-2-040. shall also be subject to the visible opacity limitations in Chapter 2, Article 8.

[Pinal County Code §4-2-050]

- b. The opacity of any plume or effluent, from a source described in Pinal County Code 2-8-300.A, as determined by Reference Method 9 in 40 CFR 60, Appendix A, shall not be:

- (1) Greater than 20% in an area that is nonattainment or maintenance for any particulate matter standard, unless an alternative opacity limit is approved by the Director and Administrator as provided in Pinal County Code 2-8-300.C and 2-8-300.D after June 2, 2005;

[Pinal County Code §2-8-300.B.1]

- (2) Greater than 20% in any area that is attainment or unclassifiable for each particulate matter standard except as provided in Pinal County Code 2-8-300.C and 2-8-300.D.

[Pinal County Code §2-8-300.B.3]

B. Additional Requirements for West Pinal County PM₁₀ Nonattainment area

[Pinal Code §4-1-030]

1. Vehicle Use in Open Areas and Vacant Lots

[Pinal Code §4-1-030.2]

- a. The Permittee shall not cause or allow visible emissions of particulate matter, including fugitive dust generated from the vehicle use in open areas and vacant lots beyond the property line within which the emissions are generated.

- b. The Permittee shall stabilize the open areas and vacant lots on which vehicles are used to by complying with any one of the stabilization requirements listed in PCAQCD Code §4-1-030.2.A.
- c. The Permittee shall apply appropriate control measures to the open areas and vacant lots on which vehicles are used as listed in PCAQCD Code §4-1-030.2.B.
- d. The Permittee shall implement one or more of the control measures described in PCAQCD Code §4-1-030.2.B within 60 calendar days following the initial discovery by the Control Officer of any open areas and vacant lots that are 0.10 acre (4,356 square feet) or larger and having a cumulative of 500 square feet or more that are disturbed by being driven over and/or used by motor vehicles, by off road vehicles, or for material dumping.
- e. The Permittee shall, within 30 calendar days, following the initial discovery by the Control Officer of the disturbance or vehicle use on open areas and vacant lots, provide in writing to the Control Officer a description and date of the control measure(s) to be implemented to prevent such disturbance.
- f. The Permittee shall implement all control measures necessary to limit the disturbance or vehicle uses on open areas and vacant lots in accordance with the requirements of PCAQCD Code §4-1-030.2.B. Control measure(s) shall be considered effectively implemented when the open areas and vacant lots meets the requirements described in PCAQCD Code §4-1-030.2.A.
- g. Use of or parking on open areas and vacant lots by the Permittee shall not be considered vehicles use in open areas and vacant lots.
- h. Establishing initial landscapes without the use of mechanized equipment or conducting landscape maintenance without the use of mechanized equipment shall not be considered vehicle use in open areas and vacant lots.

2. Open Areas and Vacant Lots

[Pinal Code §4-1-030.3]

- a. The Permittee shall not cause or allow visible emissions of particulate matter, including fugitive dust generated from the open areas and vacant lots beyond the property line within which the emissions are generated.
- b. The Permittee shall stabilize the open areas and vacant lots by complying with any one of the stabilization requirements listed in PCAQCD Code §4-1-030.3.A.ii.
- c. The Permittee shall apply appropriate control measures to the disturbed open areas and vacant lots as listed in PCAQCD Code §4-1-030.3.B.

- d. The Permittee shall implement one or more of the control measures described in PCAQCD Code §4-1-030.3.B within 60 calendar days following the initial discovery by the Control Officer of any open areas and vacant lots that are 0.10 acre (4,356 square feet) or larger and having a cumulative of 500 square feet or more that are disturbed, and if such disturbed area remains unoccupied, unused, vacant, or undeveloped for more than 15 days.
- e. The Permittee shall, within 30 calendar days following the initial discovery by the Control Officer of the disturbance on the open areas and vacant lots, provide in writing to the Control Officer a description and date of the control measure(s) to be implemented to prevent such disturbance.

3. Unpaved Parking Lots (Code §4-1-030.4)

[Pinal Code §4-1-030.4]

- a. The Permittee shall not cause or allow visible emissions of particulate matter, including fugitive dust generated from the unpaved parking lots beyond the property line within which the emissions are generated.
- b. The Permittee shall apply appropriate control measures to the disturbed unpaved parking lots as listed in PCAQCD Code §4-1-030.4.B.
- c. The Permittee shall repair and/or replace the control measures listed in PCAQCD Code §4-1-030.4.B, and shall clean-up immediately any trackout from areas accessible to the public including curbs, gutters and sidewalks when trackout extends a cumulative distance of 25 linear feet or more and at the end of the day for all other trackout.

3. Mechanized Weed Abatement And/Or Trash Removal

[Pinal Code §4-1-030.5]

The Permittee shall apply the control measures listed in PCAQCD Code §4-1-030.5.A if machinery is used to clear weeds and/or trash from open areas and vacant lots of 5,000 square feet or larger.

4. Paved Public Roadway

[Pinal Code §4-1-030.7]

- a. The Permittee upon discovery of the mud/dirt on its property due to the trackout or erosion-caused deposition that extends 25 feet or more from the nearest unpaved surface exit onto the paved public roadway shall apply any one of the control measures listed in PCAQCD §4-1-030.7.A.i.
- b. The Permittee shall remove the mud/dirt in a manner that does not cause another source of fugitive dust.
- c. In the event unsafe travel conditions would result from restricting traffic and removal of such material is not possible within 72 hours due to a weekend or holiday condition, the provisions of PCAQCD Code §4-1-

030.7.A.i can be extended upon notification to and approval by the Control Officer.

- d. The Permittee who is the owner and/or operator of any existing paved public roadways shall apply in sufficient quantity a dust suppressants to the total surface area subject to the disturbance and prevent track by applying any one of the control measures listed in PCAQCD §4-1-030.7.A.i, prior to, during and after work on unpaved road shoulders.
- e. The Permittee who is the owner and/or operator having jurisdiction over, or ownership of, public or private paved roads shall construct, or require to be constructed, all new or modified paved roads in conformance with the road shoulder width and drivable median stabilization as required in PCAQCD Code §4-1-030.7.D.
- f. The Unpaved shoulders and medians of paved roads shall be considered to have control measures effectively implemented when fugitive dust emissions do not exceed 20% opacity and silt loading does not equal or exceed 0.33 oz/ft² as determined in PCAQCD Code §4-9-310 except for unpaved shoulders on which gravel has been applied. Where gravel is utilized to prevent trackout from unpaved shoulders and medians of paved roads, surface gravel shall be uniformly applied and maintained to a depth of two (2) inches to comply with the 20% opacity standards, the gravel depth and silt content test methods in PCAQCD Code §4-9-310.
- g. The Permittee who is the owner and/or operator having jurisdiction over, or ownership of, existing public or private paved roads which do not conform with the requirements of PCAQCD Code §4-1-030.7.D shall reconstruct, or require to be reconstructed, the existing nonconforming paved road within 365 calendar days following the initial discovery that the road fails to meet the requirements. The control officer may require short-term stabilization of any paved road subject to the requirements set forth in PCAQCD Codes §§4-1-030.7.D and 4-1-030.7.E

5. Recordkeeping (Codes §§4-1-040 and 4-1-050)

[Pinal Code §4-1-040 and Pinal Code §4-1-050]

The Permittee, if subject to the above requirements, shall compile and retain records that provide evidence of control measure application including records of receipts/purchase, street sweeping, water applications, maintenance of trackout control devices, gravel pads, fences, wind barriers, tarps, type of treatment/control measure application, extent of coverage, and date applied. The supporting documentation shall be provided as soon as possible but no later than 48 hours upon a verbal or written request by the Control Officer, excluding weekends. If the Control Officer is at the site where requested records are kept, the records shall be provided without delay. Copies of such records shall be retained for at least two years.

6. Exemptions (Code §4-1-015)

[Pinal Code §4-1-015]

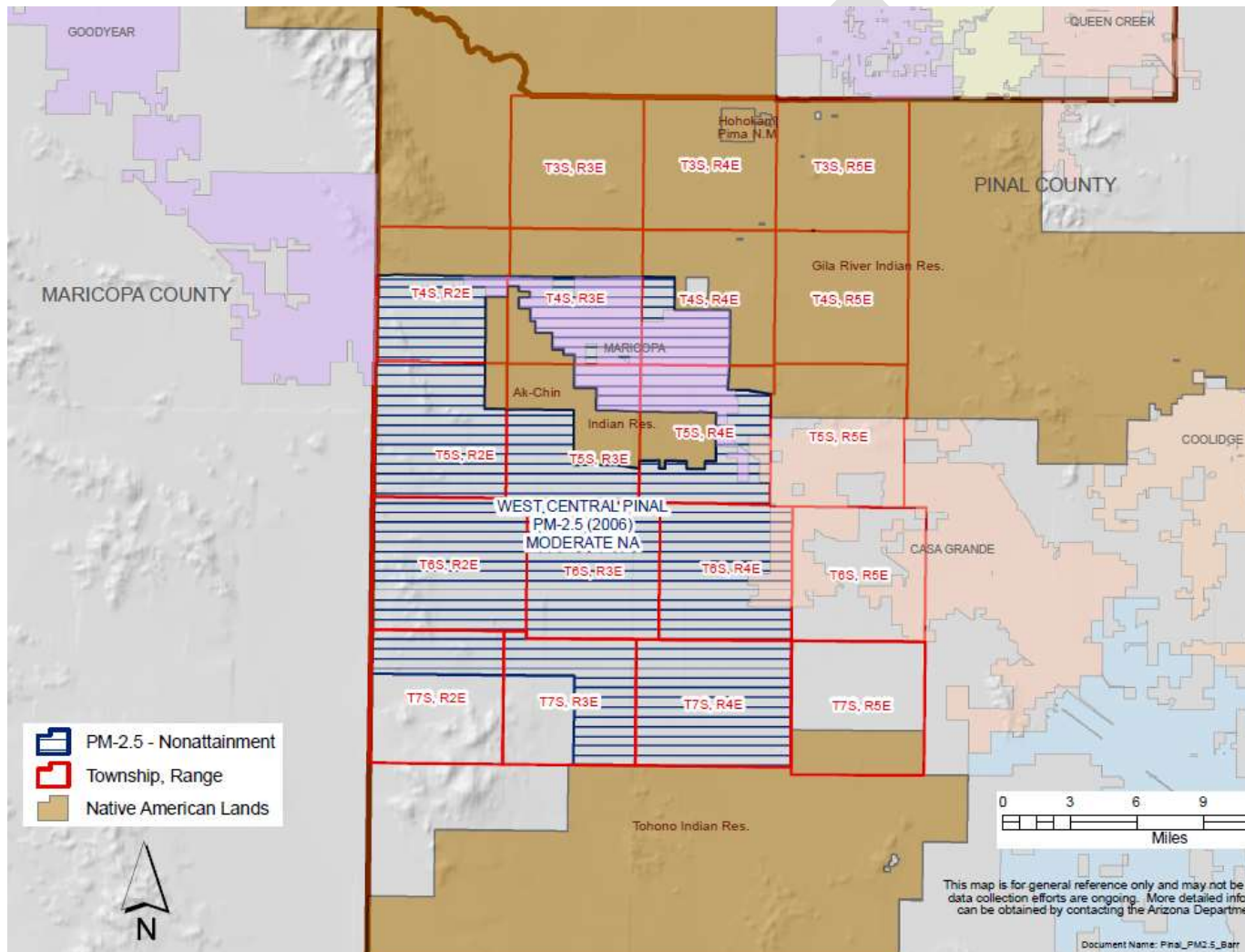
- a. In the case of legitimate vehicle test and development facilities and operations conducted by or for an equipment manufacturer, where dust is required to test and validate the design integrity, product quality and/or commercial acceptance, those specific activities shall be exempt from the applicable standards and requirements in this Article.
- b. The standards and requirements of this Article shall not apply to emergency response activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status. For purposes of this subsection, an emergency response must address a situation arising from a sudden and unforeseeable event beyond the control of the owner and/or operator, including acts of God. Activities by an owner and/or operator to address a disturbance resulting from improperly designed equipment, lack of preventative maintenance, careless or improper operation or operator error shall not qualify as an emergency response.
- c. The standards and requirements of this Article shall not apply to normal farm cultural practices according to A.R.S. §49-457 and A.R.S. §49-504.4 which are subject to Arizona Department of Environmental Quality (ADEQ) rules R18-2-610, R18-2-610.01, R18-2-611 and R18-2-611.01, R18-2-611.02, R18-2-611.03.
- d. The standards and requirements of this Article shall not apply to dust generating operations subject to the standards and/or requirements described in Chapter 4, Article 3.
- e. The standards and requirements of this Article shall not apply to the establishment of initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports. However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading, or trenching, performed to establish initial landscapes or to redesign existing landscapes.

C. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Pinal County Code §2-8-300.B.1, -300.B.3, §4-21-030, §4-21-040, §4-21-050, §4-2-040.A, -040.B, -040.D, -040.E, -040.F, -040.G, -040.I, -050, -222, and §5-5-190.D

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

APPENDIX "A": WEST PINAL COUNTY PM₁₀ NONATTAINMENT AREA





APPENDIX “B”: OPACITY SURVEY RECORDKEEPING FORM

Facility/Plant Name:

ADEQ Air Permit No.:

Date and Time	Emissions Source or Stack	Opacity Standard	Required Frequency of Instantaneous Survey	Opacity of Instantaneous Survey	If Instantaneous Survey Exceeds Opacity Standard, Result of 6-Minute Observation **	Corrective Actions	Signature or Initials of Certified Personnel	Remarks*

* Indicate in remarks when the emission source is not in use.
** Any permit deviation reports must be submitted via [myDEQ](#) for any observation that exceeds applicable opacity standards.