ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
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AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT 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", "B", "C", "D", "E", "F", "G", and "H"**

ADEQ GENERAL PERMIT NUMBER **109** PERMIT CLASS **II** EXPIRATION DATE **April 21st, 2027**

PERMIT ISSUED THIS **22nd** DAY OF **April**, **2022**

Daniel Czecholinski, Director, Air Quality Division

SIGNATURE TITLE

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AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS

I. INTRODUCTION

A. This document is a General Permit for Hot Mix Asphalt 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 hot mix asphalt plants may choose to utilize this permit in lieu of an individual permit. Such parties shall do so by obtaining a General Permit for Hot Mix Asphalt Plants which will include an Authorization to Operate (ATO) for significant pieces of equipment.

B. This General Permit covers stationary and portable hot mix asphalt plants and crushing and screening plants and/or concrete batch plants that are subject to state or county regulations. If the crushing and screening plant and/or concrete batch plant are moved and are not with the permitted hot mix asphalt plant, these plants will require separate permits.

C. Eligibility

Production limitations for hot mix asphalt plant along with crushing and screening plant and concrete batch plant have been established based on modeling analysis. Facilities which can comply with the limitations in Table 1 are eligible for this General Permit:

Table 1: Production limitations

Facility	Maximum Daily Production	
	PM_{10} Attainment Area	PM_{10} Non-attainment Area
Stand-alone Hot Mix Asphalt Plants	4,000 tons	3,000 tons
Hot Mix Asphalt Plants with Crushing & Screening Plants and Concrete Batch Plants	Hot Mix Asphalt Plant: 3,500 tons Crushing & Screening Plant: 3,250 tons Concrete Batch Plant: 1,275 cubic yards	Not authorized

Concrete batch plants with truck mix loading operations are required to operate a baghouse to control emissions at the product loading point to be eligible for this General Permit. Also, non-certified generators in Maricopa County shall be limited to combined brake horsepower of 700 HP.

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" and "B" are applicable to all facilities covered under this General Permit.

B. Attachment "C" is applicable to the Hot Mix Asphalt Plant.

C. Attachment "D" is applicable if the facility has a Crushing & Screening Plant.

D. Attachment "E" is additionally applicable if the facility has a Concrete Batch Plant.

E. If the facility is located in the Maricopa, Pima, or Pinal County, Attachments "F", "G", or "H" respectively are also applicable in addition to the above attachments.

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ATTACHMENT "A": GENERAL PROVISIONS

I. GENERAL 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 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 (ATO) 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 to all the Permittees who have been granted, or who have applications pending for 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 General 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 or revocation, or for denial of a renewal application. In addition, non-compliance with any federally enforceable requirements 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 REOPENINGS, REVOCATION AND REISSUANCE, OR TEMINATION 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;

[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. R18-510.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; or

[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:

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

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.

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 GENERAL PERMIT

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

A. Any person who has been granted coverage under this General Permit shall post such General Permit or a certificate of General Permit coverage on location where the equipment is installed in such a manner as to be clearly visible and accessible.

B. Equipment Labels

All equipment covered by this General Permit shall be clearly marked with one of the following:

1. The current permit number,

2. A serial number or other equipment number that is also listed in the permit application.

C. 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.

D. 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

E. A copy of the complete General Permit and associated ATO 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 emissions inventory questionnaire no later than June 1 every three years beginning June 1, 2021. At the Director's request, the Permittee may be required to complete and submit emissions inventory questionnaires in addition to the triennial emissions inventory questionnaire. The Director shall notify the Permittee in writing of the decision to require additional emissions inventory questionnaires.
[A.A.C. R18-2-327.A.1.b]

B. The emissions inventory questionnaire shall be on an electronic or paper form provided by the Director and shall include the information required by A.A.C. R18-2-327.A.3 for the previous calendar year.
[A.A.C. R18-2-327. A.3]

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 General Permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part 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

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

Upon presentation of credentials and other documents as may be required by law, Permittee shall allow the Department or an authorized representative (including an authorized contractor acting as a representative of the Department), to perform the following:

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

B. Have access to and copy, at reasonable times, any records that must be kept under conditions of this General Permit;

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

D. Sample or monitor, at reasonable times, substances or parameters at any location for the purpose of assuring compliance with this General Permit or other applicable requirements; and

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

X. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

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 X.A.1.b.

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

b. The report shall contain the following information:

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

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

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

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

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

(5) Nature and cause of such emissions;

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

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

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

[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 requirements contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or time frame shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations in compliance with the following schedule:

1. Notice that complies with A.A.C. R 18-2-310.01(A) is prompt for deviations that constitute excess emissions.

2. Notice regarding malfunctions or breakdowns of pollution control equipment or emissions monitoring systems that are submitted within two working days of discovery shall be considered prompt.

3. Except as provided in Condition X.B.1 and X.B.2, notice that complies with A.A.C. R18-2-306.A.5.a is prompt for all other types of deviation and shall be reported annually, concurrent with the annual compliance certifications required in Section VII, and can be submitted via myDEQ, the Arizona Department of Environmental Quality's online portal.

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

C. Emergency Provision

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

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

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition X.C.3 is met.

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

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

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

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

   d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the

time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken..

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

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

D. Compliance Schedule

[ARS § 49-426.I.5]

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

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

1. Applicability

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

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

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

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

2. Affirmative Defense for Malfunctions

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

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

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

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

c. If repairs were required, the repairs were made in an expeditious fashion

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

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

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

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

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

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

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

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

3. Affirmative Defense for Startup and Shutdown

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

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

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

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

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

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

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

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

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

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

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

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

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

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

5. Demonstration of Reasonable and Practicable Measures

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

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

XI. RECORD KEEPING REQUIREMENTS

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

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

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

2. The date(s) analyses were performed;

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

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

5. The results of such analyses; and

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

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

[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.

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

XII. REPORTING REQUIREMENTS

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

The Permittee shall submit the following reports:

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

B. Excess emission; permit deviation, and emergency reports in accordance with Section X of this Attachment.

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

XIII. 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 revoking the General Permit coverage, or to determine compliance with this General Permit. Upon request, the Permittee shall also furnish to the Director copies of records that the Permittee is required to keep under the General Permit. For information claimed confidential, the Permittee shall furnish an additional copy of such records directly to the Director along with a claim of confidentiality.

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

B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in a General Permit coverage 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]

XIV. 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]

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

2. 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]

1. Adding new emissions units that do not require authorization to operate,

2. Installing a replacement emissions unit with a higher capacity that does not require authorization to operate,

3. 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]

XV. TESTING REQUIREMENTS

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

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

B. Operational Conditions during Testing

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

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

D. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan

to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. Test duration;

2. Test location(s);

3. Test method(s); and

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

E. Stack Sampling Facilities

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

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

2. Safe sampling platform(s);

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

4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

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

G. Report of Final Test Results

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

H. Extension of Performance Test Deadline

For performance testing required under Condition XV.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 XV.H.1, 2, and 3 above, the Permittee remains subject to the requirements of Section XV.

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

5. For purposes of this Section XV, 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]

XVI. 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]

XVII. SEVERABILITY CLAUSE

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

remain valid and in force.

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

XVIII. 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 in effect on the date of General Permit issuance, provided that such applicable requirements are included and expressly identified in this permit. The permit shield shall not apply to any changes made pursuant to Sections XIV of this Attachment.

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

XIX. ACCIDENTAL RELEASE PROGRAM

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

[40 CFR 68]

XX. 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 Regulations.

[40 CFR Part 60, Part 63]

XXI. 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": FACILITYWIDE REQUIREMENTS

I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN

[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 Hot Mix Asphalt Plants.

B. *The Permittee shall not operate the equipment covered under this permit with any other concrete batch plant, or crushing & screening plant not covered by this permit if they meet the definition of a stationary source under A.A.C. R18-2-101.140.*

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

C. The Permittee shall conduct permitting services and transactions, including move notices, electronically when offered through the myDEQ online portal.

[A.A.C. R18-2-513.C.3]

III. FACILITY WIDE REQUIREMENTS

A. Operational Limitations

1. *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]

2. The Permittee shall operate and maintain all equipment in accordance with manufacturer's specifications.

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

3. *The Permittee shall not operate a co-located concrete batch plant with a truck mix product loading operation without operating a baghouse to control emissions at the product loading point.*

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

B. Prohibition in $PM_{2.5}$ Nonattainment Areas

The Permittee shall not operate in areas of Pinal County identified as non-attainment for $PM_{2.5}$. The Prohibited Area can be found at http://gisweb.azdeq.gov/arcgis/emaps/?topic=nonattain and filtering for $PM_{2.5}$ and in the map in Appendix 1 of this Permit.

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

C. PM_{10} Attainment Area Throughput Limitations

1. Stand Alone Hot Mix Asphalt Plant

The Permittee shall not operate the hot mix asphalt plant such that the throughput exceeds 4,000 tons per day (tpd).

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

2. *Hot Mix Asphalt Plant with Crushing & Screening and Concrete Batch Plants*.

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

a. The Permittee shall not operate the hot mix asphalt plant such that the throughput exceeds 3,500 tpd.

b. The Permittee shall not operate the crushing and screening plant such that the throughput exceeds 3,250 tpd.

c. The Permittee shall not operate the concrete batch plant such that the throughput exceeds 1,275 cubic yards per day (yd^3/day).

D. PM_{10} Nonattainment Area Throughput Limitations

1. Stand-alone Hot Mix Asphalt Plant

The Permittee shall not operate the hot mix asphalt plant equipment in any PM_{10} nonattainment area such that the throughput exceeds 3,000 tpd.

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

2. *The Permittee shall not operate any crushing & screening and/or concrete batch facilities with the hot mix asphalt plant in any PM_{10} nonattainment area*.

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

E. Operating Limitation for Engines in Maricopa County

While operating in Maricopa County, the Permittee shall not operate non-certified engines that are cumulatively greater than 700 brake horsepower. A non-certified engine is any engine that is not certified by the manufacturer to meet at least a Tier 1 emission standard or better in accordance with 40 CFR 89.112(a).

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

F. Opacity Monitoring Requirements

1. Monitoring Methods

a. Instantaneous Surveys and Six-Minute Observations

Any instantaneous survey or six-minute observation required by this permit shall be determined by either method listed in Conditions III.F.1.a(1)and (2) below.

(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.

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

(2) EPA Reference Method 9

The Permittee shall have on site or on call a person certified in EPA Reference Method 9 unless all instantaneous visual surveys and six-minute observations required by this permit are conducted by Alternative Method ALT-082.

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

b. Any EPA Reference Method 9 required by this permit can be conducted by Alternative Method ALT-082.

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

2. Monitoring, Recordkeeping, and Reporting Requirements

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

a. At the frequency specified in future 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 plume 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 plume on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the plume.

(1) If the six-minute observation of the plume 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 plume 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 X.A of Attachment "A".

(d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

G. Recordkeeping Requirements

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

1. The Permittee shall maintain records of the operating hours of the equipment covered under this General Permit which are subject to an hourly restriction. These records shall include the date, equipment identification or equipment type, the starting time and the stopping time. Operating hours for equipment that utilizes an hour meter does not have to be separately logged.

2. The Permittee shall maintain records of the total daily throughput of material, in tons per day, processed by the hot mix asphalt plant, and crushing and screening plant.

3. The Permittee shall maintain records of the total daily production of the concrete batch plant in cubic yards per day.

4. For monitoring and recording opacity observations, the Permittee may use format shown in the attached the "Opacity Survey Recordkeeping Form" in Appendix 2.

5. The Permittee shall keep a logbook of the updated emission calculations and shall make it available to inspectors upon request.

6. Non-Road Engines

The Permittee shall keep a log of following information for each engine that meets the definition of a non-road engine in 40 CFR Part 89 and 90.

a. Date that the engine is brought to the facility;

b. Make, model, serial number and capacity of the engine; and

c. Date that the engine is removed from the facility.

These records shall be made available to ADEQ upon request.

IV. INTERNAL COMBUSTION ENGINE(S)-NON-NSPS

A. Applicability

The requirements under this Section are applicable to any existing engine not subject to 40 New Source Performance Standards, CFR 60 Subpart IIII or 40 CFR 60 Subpart JJJJ.

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 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 quarterly periodic opacity monitoring for all engines, when in operation, as per Condition III.F. Opacity monitoring is not required for natural gas or propane fired engines.

[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, 719.C.1, and 719.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. Monitoring, 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 -719.I]

b. For diesel engines, the Permittee shall keep records of fuel supplier certifications or other documentation listing the sulfur content. These records shall be made available to ADEQ upon request.

[A.A.C. R18-2-306.A.3.c 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, 719.H, 719.I, and 719.J.

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

D. Hazardous Air Pollutants

1. Applicability

a. The requirements of this Part are applicable to any internal combustion engine marked on the ATO as applicable to affected source as defined in 40 CFR 63.6590.

[40 CFR 63.6580 and 63.6590]

b. A new or reconstructed stationary compression ignition (CI)/spark ignition (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 or JJJJ in Section V or VI 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]

(a) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program 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]

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

(a) For diesel-fired engine, Total Base Number is less than 30 percent of the Total Base Number of the oil when new, and/or 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;

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

(c) Water Content: 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 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 annually, 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 annually, whichever comes first, and replace as necessary.

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

(3) 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 IV.D.3.a(4)(a) through (c), or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated.

[40 CFR 63 Subpart ZZZZ, Table 2d]

(4) The Permittee shall operate the emergency engines according to the requirements in Conditions IV.D.3.a(4)(a) through (c). 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. If the emergency engine is not operated in accordance with the requirements in Conditions 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 the purpose of maintenance checks and readiness testing for a maximum of 100 hours per calendar year 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 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 calendar year.

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

(c) The Permittee may operate an emergency engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing.

[40 CFR 63.6640(f)(4)]

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

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

b. Recordkeeping Requirements

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

[40 CFR 63.6655(f)]

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

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

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

[40 CFR 63.6655(e)]

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 annually, 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 Base 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 annually, 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 annually, 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 80.510(b) 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 O_2 for engines between 300-500 HP,

(b) 23 ppmvd at 15 percent O_2 for engines greater than 500 HP;

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

(b) If any more than 300 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

IV.D.4.a(2) instead of the applicable emission limitations in Condition IV.D.4.b(2)(a), and crankcase ventilation system requirements Condition IV.D.4.b(3). The Permittee shall comply with the emission limitations in Condition IV.D.4.b(2)(a) 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 IV.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 to 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 O_2 or CO_2 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 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

(a) For the engines not equipped with CEMS
[40 CFR 63.6612(a), 40 CFR 63.6630, Table 5 to 40 CFR 63 Subpart ZZZZ]

(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

IV.D.4.b(2)(a). 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 Condition IV.D.4.d(2).

(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 Condition IV.D.4.d(3).

(b) For engines equipped with CEMS, the Permittee shall demonstrate initial compliance by
[40 CFR 63.6612(a), 40 CFR 63.6630, Table 5 to 40 CFR 63 Subpart ZZZZ]

(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 40 CFR 63 Subpart ZZZZ, 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 IV.D.4.b(2)(a).

[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 the 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 Condition IV.D.4.d(3); 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 was submitted to comply with 40 CFR 63 Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee 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; and

(e) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition IV.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.

[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 of continuous compliance with each emission or operating limitation for the requirements in Condition IV.D.4.f.

[40 CFR 63.6655(d)]

(4) For engines less than 300 HP and subject to management practices as shown in Condition IV.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 reports in accordance with 40 CFR 63.6650(a) and (b).

[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 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 Condition IV.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) 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 40 CFR 63 Subpart ZZZZ, the Compliance report shall contain the information in Conditions IV.D.4.i(2)(a) through (d) and the information below:

[40 CFR 63.6650(d)]

(i) The total operating time 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.

(h) For each deviation from an emission or operating limitation occurring for a stationary RICE where the Permittee is using a CMS to comply with the emission and operating limitations in 40 CFR 63 Subpart ZZZZ, the Permittee shall include information in Conditions IV.D.4.i(2)(a) through (d) and the information below:

[40 CFR 63.6650(e)]

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

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

(iii) The date, time, and duration 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 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 stationary RICE.

(x) A brief description of the CMS.

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

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

5. Requirements for Non-Emergency Spark Ignition Engines

a. Operation Requirements for 2SLB Engines, 4SRB (<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 IV.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 2SLB 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 and 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 and 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) and 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, Table 5 to 40 CFR 63 Subpart ZZZZ and 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 4SLB 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 4SRB 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 O_2, 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 O_2 using one of the O_2 measurement methods specified in Table 4 of 40 CFR Part 63 Subpart ZZZZ. Measurements to determine O_2 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 O_2 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 IV.D.5.b(3)(a). The annual compliance demonstration shall consist of at least one test run in accordance with the procedure in Conditions IV.D.5.b(3)(b).

[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 IV.D.5.b(3)(a), 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 IV.D.5.b(3)(a). 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 IV.D.5.b(3)(a).

[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 IV.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 IV.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 4SRB or 4SLB 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 was 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 IV.D.5.a(3) 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 IV.D.5.b(5).

[40 CFR 63.6655(d)]

(4) For 2SLB 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 reports in accordance with 40 CFR 63.6650(a) and (b).

[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 IV.D.5.e(3)(a) through (d) 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 IV.D.5.e(3)(a) through (d) 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), 66.6630(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]

V. INTERNAL COMBUSTION ENGINE(S) SUBJECT TO NSPS SUBPART IIII

A. Applicability

This Section applies to the following affected facilities as defined in 40 CFR 60.4200 and marked on the ATO as applicable to NSPS Subpart IIII.

1. 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)]

2. Any stationary CI ICE that are modified or reconstructed after July 11, 2005.

[40 CFR 60.4200(a)(3)]

3. Stationary CI ICE may be eligible for exemption from the requirements of NSPS 40 CFR 60 Subpart IIII 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 applicable emission standards in Condition V.C.1 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 V.C.1.d.

[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 V.C.1.d.

[40 CFR 60.4211(a)(2), and -4211(g)]

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

[40 CFR 60.4211(a)(3)]

2. Fuel Requirements

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

[40 CFR 60.4207(b)]

a. Sulfur content; 15 ppm maximum; and

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

3. If an engine is equipped with a diesel particulate filter to comply with the emission standards, *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, brake 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 shall comply with the emission standards in Table 1 of 40 CFR 60 Subpart IIII.

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

b. 2007 and later model years with displacement < 10 l/cyl and maximum engine power ≤ 3,000 hp shall comply with the emission standards for new non-road compression ignition engines in 40 CFR 89.112, 40 CFR 89.113, 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 model year and maximum engine power.

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

c. 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)]

d. 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 V.C.1 shall 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 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; 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 V.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 V.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, the Permittee shall demonstrate compliance by;

[40 CFR 60.4211(d)]

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

(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;

(a) Identification of the specific parameters that the Permittee proposes to monitor continuously; and

(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

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

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

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

d. The Permittee using modified or reconstructed engine subject to an applicable emission standard(s) specified in Condition V.C.1 shall demonstrate compliance by:

(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 V.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 is a pre-2007 model year > 175 hp and not certified, must:

[40 CFR 60.4214(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

(b) The address of the affected source; and

(c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; and

(d) Emission control equipment; and

(e) Fuel used.

(2) Keep records of the following information:

[40 CFR 60.4214(a)(2)]

(a) All notifications submitted to comply with this NSPS 40 CFR 60 Subpart IIII and all documentation supporting any notification; and

(b) Maintenance conducted on the engine; and

(c) If the engine is certified, documentation from the manufacturer that the engine is certified to meet the applicable emission standards; or

(d) If the engine is not certified, documentation that the engine meets the emission standards.

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 engines according to the requirements in Condition V.D.1.b(1) through (3). In order for the engines to be considered emergency stationary engine, any operation other than emergency operation, maintenance response, and operation in non-emergency situations for 50 hours per year. If the emergency engine is not operated in accordance with the requirements in Conditions below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[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 maintenance checks and readiness testing for a maximum of 100 hours per calendar year 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)]

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations.

[40 CFR 60.4211(f)(3)]

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 required in Condition V.C.1.d.

[40 CFR 60.4211(g)]

2. Emission Limitations and Standards

a. Fire Pump Engines

The Permittee shall comply with the emission limits in Table 4 of 40 CFR Subpart IIII for fire pump engines.

[40 CFR 60.4205(c)]

b. Emergency Engines

(1) Pre-2007 model year emergency stationary internal combustion engines with a displacement of less than 10 liters per cylinder that are not fire pump engines shall comply with the Table 1 of 40 CFR Subpart IIII.

.[40 CFR 60.4205(a)]

(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 brake horsepower and a displacement of less than 10 liters per cylinder shall meet the emission standards specified below: Colleen Roche

[40 CFR 60.4202(a)]

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

[40 CFR 60.4202(a)(1)]

(a) 2007 model year engines shall meet the emission standards for new non-road compression ignition engines in 40 CFR 89.112 and 40 CFR 89.113, 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 non-road 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 IIII.

(ii) For engines with a maximum engine power greater than or equal to 50 brake horsepower, the Permittee shall meet the emission standards for new non-road compression ignition engines in 40 CFR 89.112 and 40 CFR 89.113, for all pollutants, 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 94.8, as applicable, for all pollutants, for the same displacement and maximum 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

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 Conditions V.D.2.a through c.

[40 CFR 60.4205(f)]

3. Compliance Determinations

a. General Requirements

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 Condition V.D.2.b(1), shall demonstrate compliance according to one of the methods specified below:

[40 CFR 60.4211(b)]

(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.

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 V.D.2.b(2), the Permittee shall comply by purchasing an engine certified to the emission standards 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 60.4211(c)]

d. 2007 and Later Fire Pump Engines

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 Table 2 and that are required to comply with the emission standards specified in Condition V.D.2.b(1) shall comply by purchasing an engine certified to the emission standards in 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.

[40 CFR 60.4211(c)]

Table 2: Engine Power and Model Year

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

e. 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 V.D.2, the Permittee shall maintain records, including manufacturer specifications, demonstrating that the engine meets the brake 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;

(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.

(2) Keep records of the information the following:

[40 CFR 60.4214(a)(2)]

(a) All notifications submitted to comply with this NSPS 40 CFR 60 Subpart IIII and all documentation supporting any notification.

(b) Maintenance conducted on the engine.

(c) If the stationary CI internal combustion engine is certified, documentation from the manufacturer that the engine is certified to meet the emission standards.

(d) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

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. 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. 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

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]

VI. INTERNAL COMBUSTION SPARK IGNITION ENGINES SUBJECT TO 40 CFR 60 SUBPART JJJJ

A. Applicability

This Section applies to the affected facilities as defined in 40 CFR 60.4230 and marked on the ATO as applicable 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 80.195.

[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, emergency demand response, 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 2 in Condition VI.D.12 except for engines applicable to Conditions VI.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 2 in Condition VI.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 3 in Condition VI.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 3 in Condition VI.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 *3* in Condition VI.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 VI.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 VI.D.6 through 8 or VI.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 (O_2), a CO emission standard 540 ppmvd at 15 percent O_2 (675 ppmvd at 15 percent O_2 for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O_2, 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 VI.D.9.

[40 CFR 60.4233(h)]

12. Emission Limits Table

Table 3: 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	[c]10	387	N/A	N/A	N/A	N/A
	HP≥130		2.0	4.0	1.0	160	540	86

[a] The Permittees with stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.

[b] The Permittees with new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2a do not have to comply with the CO emission standards of this table.

[c] The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_X + HC.

[d] For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

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 VI.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 VI.E.1.a and VI.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 VI.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 VI.D.6 through 8, or VI.D.9 as applicable, shall demonstrate compliance according to one of the methods specified in Conditions VI.E.9.a and VI.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 VI.E.1.

b. Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in Conditions VI.D.6 through 8, or VI.D.9 as applicable, and according to the performance testing requirements specified in 40 CFR 60.4244, as applicable, and according to Conditions VI.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 VI.D.10 shall demonstrate compliance according Conditions VI.E.2.b(1) or (2), except that if the Permittee complies according to Conditions VI.E.2.b(1). The Permittee shall demonstrate that the non-certified engine complies with the emission standards specified in Condition VI.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 VI.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, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Conditions VI.E.4.a(1) through (3) below, is prohibited. If you do not operate the engine according to the requirements in Conditions VI.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 Conditions VI.E.4.a(2)(a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition VI.E.4.a(3) counts as part of the 100 hours per calendar year allowed by Condition VI.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.

(b) Emergency stationary ICE may be operated 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 §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.

(c) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(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 VI.E.4.a(2). Except as provided in Condition VI.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 2 in Condition VI.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 is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[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 VI.D.4 or 5, you must comply by one of the methods specified in Conditions VI.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 VI.D.10, the Permittee shall demonstrate compliance according to one of the methods specified in Conditions VI.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 VI.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 90, 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:

[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. 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 ConditionsVI.E.4.a(2)(b) and (c), shall submit an annual report according to the requirements in Conditions VI.F.6.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 Conditions VI.E.4.a(2)(b) and (c) including the date, start time, and end time for engine operation for the purposes specified in Conditions VI.E.4.a(2)(b) and (c);

(6) Number of hours the engine is contractually obligated to be available for the purposes specified in Conditions VI.E.4.a(2)(b) and (c); and

[40 CFR 60.4245(e)(1)(vi)]

(7) Hours operated for the purposes specified in Condition VI.E.4.a(3)(a), including the date, start time, and end time for engine operation for the purposes specified in Condition

VI.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.

[40 CFR 60.4245(e)(3)]

7. Permit Shield

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

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

VII. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Section 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% measured in accordance with the Arizona Testing Manual, Reference Method 9.

[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 is repaired, constructed, or reconstructed;

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

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

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

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

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

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

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

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

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

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

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

2. Air Pollution Control Requirements

a. Haul Roads and Storage Piles

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

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

b. Explosive Blasting

The Permittee shall use good air pollution control practices for minimizing emissions when conducting explosive blasting operations.

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

[Material Permit Condition is indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

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

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

b. Opacity Monitoring Requirements

The Permittee shall conduct a weekly monitoring of visible emissions from the fugitive dust sources as per the opacity monitoring requirements specified in Condition III.F.

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

c. Explosive Blasting

The Permittee shall keep records of the following information:

(1) The date and time each blast occurred;

(2) The amount of explosive blasting material used, in pounds, for each blast; and

(3) The type of explosive blasting material used for each blast.

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

C. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-604, -605, -606, -607, and -614.

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

VIII. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

1. Particulate Matter and Opacity

a. Emission Limitations/Standards

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

(1) Wet blasting;

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

(3) Any other method approved by the Director.

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

b. Opacity

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

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

2. Monitoring and Recordkeeping Requirement

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

a. The date the project was conducted;

b. The duration of the project; and

c. Type of control measures employed.

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

3. Permit Shield

Compliance with this Part 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 VIII.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more

than 20 percent of its total volume composed of the chemical compounds classified in Conditions VIII.B.1.a(3)(a) through (c), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

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

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

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

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

(4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions VIII.B.1.a(3)(a) through (c), 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 VIII.B.1.b(1).

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

c. Permit Shield

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

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

2. Opacity

a. Emission Limitation/Standard

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

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

b. Permit Shield

Compliance with the conditions of this Part 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.8]

2. Monitoring and Recordkeeping Requirement

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

3. Permit Shield

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

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

ATTACHMENT "C": SPECIFIC CONDITIONS FOR HOT MIX ASPHALT PLANTS

I. HOT MIX ASPHALT PLANT

A. Applicability

1. Hot Mix Asphalt facility is defined as any combination of the following equipment:

   a. Dryers;

   b. Systems for Screening, Handling, Storing, and Weighing Hot Aggregates;

   c. Systems for Loading, Transferring, and Storing Mineral Filler;

   d. Systems for Mixing Hot Mix Asphalt; and

   e. Loading, Transfer, and Storage Systems Associated with Emission Control Systems.

2. Any equipment defined in Condition I.A.1 which was constructed after June 11, 1973, is subject to New Source Performance Standards (NSPS), Subpart I.

   [40 CFR 60.90]

3. Any equipment defined in Condition I.A.1 which was constructed before June 11, 1973, is subject Existing Source Performance Standards under the Arizona Administrative Code R 18-2-708.

   [A.A.C. R 18-2-708]

B. Smoke Point Requirements

1. Smoke Point Limits

   a. The Permittee shall have, on site, a certificate stating the asphaltic smoke point for the material being processed.

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

   b. The Permittee shall not operate the dryer burner in such a way that the temperature of the hot aggregate mixture is equal to or greater than the smoke point of the material being processed.

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

2. Monitoring and Recordkeeping Requirements

   a. *The Permittee shall install*, operate and maintain *a temperature monitoring device and shall continuously record the temperature of the hot aggregate mixture to demonstrate compliance with Condition I.B.1.b.*

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

   b. The Permittee shall maintain records of the temperature of the hot aggregate mixture to demonstrate compliance with the Condition I.B.1.b.

These records shall be provided to the Department upon request.
[A.A.C. R18-2-306.A.3.c]

C. Fuel Limitations

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

1. The Permittee shall only burn fuels as specified in the ATO.

2. If the Permittee is authorized to burn "on specification" used oil in the Drum Dryer, it shall be used only under the following conditions:

   a. The used oil 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 levels (in parts per million by weight) provided in Table 4:

Table 4: Contaminants Limits

Name of Pollutant	Limit
Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
Halogens	1000 ppm
PCBs	2 ppm

3. *The Permittee shall not burn hazardous waste in the drum dryer.*
[A.A.C. R18-2-306.A.2, -306.01, and -331.a.3.a]
[Material permit conditions are indicated by underline and italics]

D. Particulate Matter & Opacity

1. Emissions Limitations & Standards

   a. For equipment subject to NSPS requirements as indicated in the ATO,

      (1) The Permittee shall not cause or allow to be discharged into the atmosphere particulate matter in excess of 0.04 grains per dry standard cubic foot.
      [40 CFR 60.92]

      (2) *The Permittee shall not cause or allow to be discharged into the atmosphere from any equipment listed in Condition I.A.1 any plume which exhibits opacity greater than 20 percent*.
      [A.A.C. R18-2-331.A.3.f and 40 CFR 60.92]
      [Material permit conditions are indicated by underline and italics]

b. For equipment not subject to NSPS standards as indicated in the ATO, the Permittee shall not cause:

(1) the discharge of particulate matter into the atmosphere, in any one hour, in total quantities in excess of the amounts calculated by one of the following equations:

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

[A.A.C. R18-2-708.B]

$E = 4.10P^{0.67}$

Where:

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

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

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

$E = 55.0P^{0.11} – 0.40$

Where:

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

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

(c) The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable particulate matter emissions.

[A.A.C. R18-2-708.D]

(2) Opacity

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

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

2. Air Pollution Control Requirements

a. Drum Dryer Baghouse/Venturi Scrubber

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install, maintain, and *operate a venturi scrubber or a baghouse on the drum dryer in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.*

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

b. Cement Silo Baghouse/Dust Collector

(1) *At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, install,* maintain, and *operate the baghouse/dust collector on the cement/ fly ash silo in a manner consistent with good air pollution control practice for minimizing particulate matter emissions*.

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

(2) *Loading of cement/fly ash storage silos shall be conducted in such a manner that the displaced air does not by-pass the baghouse/dust collector and is not directly vented to the atmosphere*.

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

c. Spray Bars

The Permittee shall install, maintain, and *operate spray bars at all times, including periods of startup, shutdown, and malfunction, to control visible emissions from screening, handling, transporting or conveying of materials, or other operations likely to result in significant amounts of airborne dust, or the material shall be adequately wet to minimize visible emissions to the extent practicable.*

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

d. Product Delivery System

The Permittee shall maintain, and operate the product delivery system so as to minimize visible emissions during material transfer to trucks.

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

3. Monitoring, Record Keeping and Reporting Requirements

a. Baghouse

(1) *If a baghouse is used to control emissions from any affected facility, the Permittee shall install, calibrate,* maintain and operate *a device for the continuous measurement of the pressure drop across the baghouse. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water gauge pressure) and must be calibrated on an annual basis in accordance with manufacturer's instructions*.

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

(2) At the time of performance test, the Permittee shall monitor the pressure drop across the baghouse and establish the operating range. The operating range shall be +/- 30% of the average of the pressure drop readings recorded during the performance tests.
[A.A.C. R18-2-306.A.3.c]

(3) The Permittee shall record the pressure drop across the baghouse once per day. If the pressure drop is outside the range established during the performance test, the Permittee shall take corrective action to bring this parameter within the normal range. The Permittee may use manufacture recommended range until the performance test is conducted and the operating range is established.
[A.A.C. R18-2-306.A.3.c]

(4) Baghouses shall be maintained in accordance with the following:
[A.A.C. R18-2-306.A.3.d]

(a) Prior to start-up, visual inspections shall be conducted on all venting ducts or lines, fittings (including dust shroud), and the blower;

(b) Following shut-down, all pressurized systems shall be turned "off";

(c) 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;

(d) All ducts, hoods, framework, and housings shall be checked daily for signs of wear;

(e) The fan motor, bearings, shaking device, reverse-jet blow rings, valves, and dampers shall be lubricated regularly and checked for wear; and

(f) The Permittee shall maintain records which demonstrate compliance with the activities listed in Conditions I.D.3.a(4)(a) through (e).

b. Wet Scrubber

If a wet scrubber is used to control emissions from any affected facility, *the Permittee shall install, calibrate*, maintain and operate *the following monitoring devices:*

(1) *A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250*

pascals (± 1 inch water gauge pressure) and must be calibrated on an annual basis in accordance with manufacturer's instructions.

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

(2) *A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions*.

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

(3) At the time of performance test, the Permittee shall monitor the pressure drop across the scrubber and scrubber liquid flow rates and establish the operating ranges for these parameters. The operating range shall be ± 30% of the average of the pressure drop and flow rates recorded during the performance tests.

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

(4) The Permittee shall record the pressure drop across the scrubber, and the scrubber liquid flow rate once per day. If any of these parameters are outside the ranges established during the most recent performance test, the Permittee shall take corrective action to bring these parameters within the normal range. The Permittee may use manufacture recommended range until the performance test is conducted.

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

c. Wet Suppression Systems

(1) Water sprays shall be operated and maintained in accordance with the following:

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

(a) Prior to start-up, the water supply shall be checked, all nozzles shall be inspected, and all associated valves shall be opened;

(b) Following shut-down, all nozzles shall be inspected and all associated valves shall be closed;

(c) The spray system shall be checked daily for performance; and

(d) All nozzles and valves shall be cleaned or replaced as needed.

(2) Water trucks, or the equivalent, shall be operated and maintained in accordance with the following:

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

(a) Prior to start-up, the water supply shall be checked, all nozzles shall be inspected, and all associated valves shall be opened;

(b) Following shut-down, all nozzles shall be inspected and all associated valves shall be closed;

(c) Safety and equipment checks shall be conducted daily; and

(d) Normal vehicle maintenance shall be performed on a regular or "as needed" basis.

(3) The Permittee shall maintain records which demonstrate compliance with the activities listed in Conditions I.D.3.c(1) and (2).

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

d. When in operation, the Permittee shall, to demonstrate compliance with the opacity limit contained in Conditions I.D.1.a(2) and I.D.1.b(2), conduct weekly monitoring of visible emissions from the equipment under this Section, in accordance with Condition III.F of Attachment "B".

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

e. Black light inspection for Baghouse

(1) The Permittee shall conduct periodic black light inspections on the bags contained in the drum dryer baghouse in an effort to detect broken or leaking bags. The black light inspection shall be performed every 6 months, and within 15 days after any move.

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

(2) If broken or leaking bags are detected, the Permittee shall repair or replace the bags as soon as practicable. Upon completion of the inspection, the Permittee shall record the name of the inspector, the date, the time, and the results of the inspection and repairs.

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

(3) If the facility is not operating, the black light inspection is not required to be performed for the duration of non-operation. Within 15 days of resumption of operation, the Permittee shall perform the black light inspection. The Permittee shall document periods of non-operation.

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

4. Testing Requirements

a. Testing Requirements for NSPS affected Drum Dryer

(1) If the initial performance test has not been conducted earlier, the Permittee shall, within 180 days of issuance of coverage under this permit, conduct initial performance test for particulate matter

(PM) in accordance with EPA Reference Method 5 to show compliance with Conditions I.D.1.a(1).

[40 CFR 60.8]

(2) If there is a record of initial performance test performed earlier, the Permittee shall, within 12 months of issuance coverage under this permit, conduct performance test for particulate matter (PM) in accordance with EPA Reference Method 5 from the drum dryer to show compliance with Conditions I.D.1.a(1).

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

b. Testing Requirements for non-NSPS Drum Dryer

The Permittee shall, within 12 months of issuance coverage under this permit, shall conduct a performance test for particulate matter (PM) in accordance with EPA Reference Method 5 from the drum dryer to show compliance with Conditions I.D.1.b(1).

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

c. If the emissions during a performance test in Conditions I.D.4.a and b are more than 75 percent of the applicable emission standard, the Permittee shall conduct a subsequent performance test between 10 and 14 months of the date of previous test.

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

d. If emissions during a performance test in Conditions I.D.4.a and b, or in any subsequent performance test in Condition I.D.4.c are less than or equal to 75 percent of the applicable emission standards, no subsequent performance test is required in the permit term.

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

e. If the Permittee is not operating, or is operating for a duration of less than 5 hours in a day, on a consistent basis, that the Permittee cannot complete the 3 runs required for a performance test, the Permittee may delay the performance test. The Permittee shall notify the Department at least 30 days prior to the due date if the performance test is likely to be delayed along with the reasons for delay. The Permittee shall reschedule the test in consultation with ADEQ.

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

f. The performance tests required in the Conditions I.D.4.a through e shall be performed when the facility is operating at more than 90% of the representative operating capacity of the drum dryer.

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

E. Recordkeeping Requirements

1. The Permittee shall maintain, on site, copies of the fuel analysis supplied by the marketer for each batch of "on specification" used oil, and shall be responsible for ensuring that the results of the analyses confirm that the contaminant levels specified in Condition I.C.2 are not exceeded.

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

2. The Permittee shall maintain records of the production rate of hot mix asphalt and the percentage of recycled asphalt in the aggregate.

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

F. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.90 & 92, A.A.C. R18-2-702.B.3, -708.B, and D.

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

II. ASPHALT HEATER REQUIREMENTS

A. Applicability

This Section is applicable to asphalt heaters at hot mix asphalt production facilities and rubber mixing facilities.

B. Fuel Limitations

The Permittee shall burn only those fuels that are authorized by the ATO.

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

C. Particulate Matter and Opacity

1. Emissions Limitations and Standards

a. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel in Asphalt Heater into the atmosphere in excess of the amounts calculated by the following equation:

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

Where:

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

Q = the heat input in million Btu per hour

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

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

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

c. The Permittee shall not cause, allow or permit the opacity of any plume or effluent from the asphalt heater(s) to exceed 15 percent.

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

2. Monitoring, Recordkeeping, and Reporting Requirements

a. The Permittee shall keep records of fuel supplier certifications. The certification shall contain information regarding the name of fuel supplier and heating value of the fuel. These records shall be made available to ADEQ upon request.

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

b. When in operation, the Permittee shall conduct monthly monitoring of visible emissions from the stack of the asphalt heaters, as specified in Condition III.F of Attachment "B". Opacity monitoring is not required for natural gas fired asphalt heater.

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

c. The Permittee shall report all 6-minute periods during which the visible emissions exceed 15 percent opacity, as required in Condition X of Attachment "A".

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

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-724.B, C.1, and J.

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

D. Sulfur Dioxide

1. Emission Limitations and Standards

a. The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu.

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

b. While burning diesel fuel, the Permittee shall only burn ultralow sulfur fuel (sulfur content below 15 ppm by weight) in the asphalt heaters.

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

2. Monitoring, Recordkeeping and Reporting Requirements

The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit in Condition II.D.1.b.

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

3. Permit Shield

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

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

ATTACHMENT "D": SPECIFIC CONDITIONS FOR CRUSHING AND SCREENING PLANTS

I. APPLICABILITY

For the purposes of this permit, the crushing and screening plant refers to the stationary or portable crushing and screening equipment with the hot mix asphalt plant covered by this air quality control permit.

II. CRUSHING AND SCREENING OPERATIONS SUBJECT TO NEW SOURCE PERFORMANCE STANDARDS (NSPS)

A. Applicability

1. An NSPS crushing and screening facility is defined as any combination of the following equipment that commenced construction, reconstruction, or modification after August 31, 1983:

[40 CFR 60.670(a) and (e)]

a. Crushers;

b. Grinding mills;

c. Screening operations;

d. Bucket elevators;

e. Belt conveyors;

f. Bagging operations;

g. Storage bins;

h. Enclosed truck or railcar loading stations;

2. Facilities at the following plants are not subject to the requirements of this Section:

[40 CFR 60.670(c) and 670(a)(2)]

a. Fixed sand and gravel plants and crushed stone plants with capacities of 23 megagrams per hour (25 tons per hour) or less;

b. Portable sand and gravel plants and crushing stone plants with capacities of 136 megagrams per hour (150 tons per hour) or less; and

c. Common clay plants and pumice plants with capacities of 9 megagrams per hour (10 tons per year) or less.

d. All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations.

B. Notification Requirements

1. The Permittee shall furnish to the Director for all new facilities that were not previously permitted a written notification as follows:

   a. A notification of the date construction or reconstruction (as defined under 40 CFR 60.15 and 60.673) of the permitted facility is commenced postmarked no later than 30 days after such date.

   [40 CFR 60.7(a)(1)]

   b. A notification of the actual date of initial startup of a permitted facility postmarked within 15 days after such date.

   [40 CFR 60.7(a)(3)]

2. The Permittee shall furnish to the Director a written notification as follows:

   a. A notification of any physical or operational change to an affected facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14.(e).

   [40 CFR 60.7(a)(4)]

   b. This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Director may request additional relevant information subsequent to this notice.

   [40 CFR 60.7(a)(4)]

   c. A notification of the actual date of initial startup of each affected facility shall be submitted to the Director.

   [40 CFR 60.7(a)(5)]

   d. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the Permittee to the Director. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

   [40 CFR 60.676(i)(1)]

   e. For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

   [40 CFR 60.676(i)(2)]

C. Particulate Matter and Opacity

1. Emission Limitations and Air Pollution Control

   a. Crusher Operations without Capture Systems

      (1) *The Permittee shall not allow to be discharged into the atmosphere from any crusher which commenced construction,*

modification, or reconstruction after August 31, 1983, but before April 22, 2008, at which a capture system is not used, any fugitive emissions which exhibit visible emissions greater than 15 percent opacity.

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

(2) *The Permittee shall not allow to be discharged into the atmosphere from any crusher which commenced construction, modification, or reconstruction on or after April 22, 2008, at which a capture system is not used, any fugitive emissions which exhibit visible emissions greater than 12 percent opacity*.

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

b. Crusher Operations with Capture Systems and All Other Affected Facilities

(1) *The Permittee shall not allow to be discharged into the atmosphere from any grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading stations or any other affected facility, which commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, any fugitive emissions (including emissions escaping capture systems) which exhibit visible emissions greater than 10 percent opacity*.

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

(2) *The Permittee shall not allow to be discharged into the atmosphere from any grinding mill, screening operation, bucket elevator, transfer point on belt conveyors, bagging operation, storage bin, enclosed truck or railcar loading stations or any other affected facility, which commenced construction, modification, or reconstruction on or after April 22, 2008, any fugitive emissions (including emissions escaping capture systems) which exhibit visible emissions greater than 7 percent opacity*.

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

(3) The Permittee shall not allow to be discharged into the atmosphere from any affected facility which commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, stack emissions which contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot).

[40 CFR 60.672(a)]

(4) The Permittee shall not allow to be discharged into the atmosphere from any affected facility which commenced construction, modification, or reconstruction on or after April 22, 2008, stack emissions which contain particulate matter in excess of 0.032

grams per dry standard cubic meter (0.014 grains per dry standard cubic foot)

[40 CFR 60.672(a)]

(5) *The Permittee shall not allow to be discharged into the atmosphere from any affected facility which commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, dry control device stack emissions which exhibit visible emissions greater than 7 percent opacity*.

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

(6) *The Permittee shall not allow to be discharged into the atmosphere from any individual enclosed storage bin, which commenced construction, modification, or reconstruction on or after April 22, 2008, dry control device stack emissions which exhibit visible emissions greater than 7 percent opacity*.

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

(7) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the stack particulate matter limits of Conditions II.C.1.b(3) and (4), but must meet the applicable opacity limits of Conditions II.C.1.b(5) and (6). This exemption does not apply for multiple storage bins with combined stack emissions.

[40 CFR 60.672(f)]

c. Operations Enclosed in a Building

If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility shall comply with the applicable emission limitations of Conditions II.C.1.a or b, or the building enclosing the affected facility or facilities shall comply with the following emission limits:

(1) *The Permittee shall not allow to be discharged into the atmosphere from the building openings (except for vents) any fugitive emissions which exhibit visible emissions greater than 7 percent opacity*.

[40 CFR 60.672(e)(1) and A.A.C. R18-2-331.A.3.f]
[Material permit conditions are indicated by underline and italics]

(2) The Permittee shall not allow to be discharged into the atmosphere from any vent of the building any emissions from any affected facility which commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, which contain particulate matter in excess of 0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot) or exhibit greater than 7 percent opacity. [40 CFR 60.672(e)(2)]

(3) The Permittee shall not allow to be discharged into the atmosphere

from any vent of the building any emissions from any affected facility which commenced construction, modification, or reconstruction on or after April 22, 2008, which contain particulate matter in excess of 0.032 grams per dry standard cubic meter (0.014 grains per dry standard cubic foot).

[40 CFR 60.672(e)(2)]

d. *Water spray bars or equivalent control equipment shall be used whenever the equipment is operating, or material shall be adequately wet to minimize visible emissions to the extent practical.*

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

2. Monitoring, Reporting, and Recordkeeping Requirements

a. When in operation, the Permittee shall conduct weekly opacity monitoring on the equipment under this Section to which an opacity standard applies, in accordance with Condition III.F of Attachment "B".

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

b. *The Permittee shall install, calibrate,* maintain, and operate *monitoring devices, or other approved methods, which can be used to determine the daily process weight of sand, gravel or crushed stone produced. The weighing devices shall have an accuracy of plus or minus 5 percent over their operating range.*

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

c. If a wet scrubber is used to control emissions from any affected facility, *the Permittee shall install*, calibrate, maintain and *operate the following monitoring devices:*

(1) *A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals (± 1 inch water gauge pressure) and must be calibrated on an annual basis in accordance with manufacturer's instructions*.

[40 CFR 60.674(a)(1) and A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

(2) *A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions*.

[40 CFR 60.674(a)(2) and A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

d. If wet suppression is used to control emissions from any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, the Permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in

the wet suppression system. The Permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if it is found that water is not flowing properly during an inspection of the water spray nozzles. The Permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under Condition II.C.2.i.
[CFR 60.674(b)]

(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Condition II.C.3.a(2) provided that the affected facility meets the following criteria.

(a) The Permittee conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections shall be conducted according to this Condition II.C.2.d and Condition II.C.2.i and
[40 CFR 60.674(b)(1)(i)]

(b) The Permittee shall designate which upstream water spray(s) will be periodically inspected at the time of the initial performance test required by 40 CFR 60.11 and Condition II.C.3.
[40 CFR 60.674(b)(1)(ii)]

(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under Condition II.C.2.i shall specify the control mechanism being used instead of the water sprays.
[40 CFR 60.674(b)(2)]

e. Except as specified in Condition II.C.2.f, the Permittee of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, and which uses a baghouse to control emissions shall conduct quarterly 30-minute visible emissions inspections using EPA Method 22. The Method 22 test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the Permittee shall initiate corrective action within 24 hours to return the baghouse to normal operation. The Permittee shall record each Method 22 test, including the date and any corrective actions taken, in the logbook required under Condition II.C.2.i. The Permittee may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test in accordance with Condition II.C.3.b simultaneously with a Method 22 test to determine what constitutes normal visible emissions from the baghouse when it is in compliance with the applicable PM limit.

[40 CFR 60.674(c)]

f. Wet Operations

The Permittee that operates any wet material processing operation that processes saturated material and subsequently processes unsaturated materials shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limits and the emission test requirements of 40 CFR 60.11.

[40 CFR 60.676(g)]

g. Wet Scrubber

(1) During the initial performance test of a wet scrubber, and daily thereafter, the Permittee shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

[40 CFR 60.676(c)]

(2) After the initial performance test of a wet scrubber, the Permittee shall submit semiannual reports to the Director of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate decrease by more than 30 percent from the averaged determined during the most recent performance test. The reports shall be postmarked within 30 days following end of the second and fourth calendar quarters.

[40 CFR 60.676(d) and (e)]

h. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Condition II.C.1, including reports of opacity observations made using Method 9 to demonstrate compliance with the opacity standards in Condition II.C.1.

[40 CFR 60.676(f)]

i. The Permittee that operates affected facilities for which construction, modification, or reconstruction commenced on or after April 22, 2008, shall record each periodic inspection required under Conditions II.C.2.d including dates and any corrective actions taken, in a logbook (in written or electronic format). The Permittee shall keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Director upon request.

[40 CFR 60.676(b)(1)]

3. Testing Requirements

a. Initial Compliance

(1) Unless the initial test has been conducted previously, the Permittee shall demonstrate initial compliance with the applicable opacity and PM limits for stack emissions contained in Conditions II.C.1.b(3) through (7) and Conditions II.C.1.c(1) through (3) by

conducting initial performance tests according to 40 CFR 60.8 and the test methods and procedures of Condition II.C.3.b. Affected facilities controlled by wet scrubbers are exempt from opacity testing.

[Table 2 to 40 CFR 60 Subpart OOO]

(2) Unless the initial test has been conducted previously, the Permittee shall demonstrate initial compliance with the applicable opacity limits for fugitive emissions contained in Conditions II.C.1.a(1) and (2) and II.C.1.b(1) and (2) by conducting initial performance tests according to 40 CFR 60.11 and the test methods and procedures of Condition II.C.3.c. Affected facilities that commenced construction, modification, or reconstruction on or after April 22, 2008, and are not controlled by water sprays or water carryover from upstream water sprays shall conduct a repeat performance test within 5 years of the previous test.

[Table 3 to 40 CFR 60 Subpart OOO]

b. The Permittee shall determine compliance with the PM and opacity standards for stacks in Condition II.C.1 as follows:

[40 CFR 60.675(b)]

(1) Except as specified in Condition II.C.3.h(3), Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

c. In determining compliance with the fugitive emission opacity standards in Condition II.C.1, the Permittee shall use Method 9 and the procedures in 40 CFR 60.11, with the following additions:

[40 CFR 60.675.(c)(1)]

(1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A–4 of 40 CFR 60, Section 2.1) must be followed.

(3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a

water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

d. In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

[40 CFR 60.675.(c)(2)(i)]

e. The duration of the Method 9 observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

[40 CFR 60.675.(c)(2)(ii)]

f. When determining compliance with the fugitive emissions standards for any affected facility under Condition II.C.1, the duration of the Method 9 observations shall be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits shall be based on the average of the five 6-minute averages.

[40 CFR 60.675(c)(3)]

g. To demonstrate compliance with the fugitive emission limits for buildings specified in Condition II.C.1.c(1), the Permittee shall complete the testing specified in following conditions. Performance tests shall be conducted while all affected facilities inside the building are operating.

[40 CFR 60.675(d)]

(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the Permittee of the affected facility shall conduct an initial Method 9 performance test according to Condition II.C.3.b and 40 CFR 60.11.

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the Permittee has previously conducted an initial Method 22 performance test showing zero visible emissions, then the Permittee has demonstrated compliance with the opacity limit in Condition II.C.1.c(1). If the Permittee has not conducted an initial performance test for the building before April 22, 2008, then the Permittee shall conduct an initial Method 9 performance test according to Condition II.C.3.b and 40 CFR 60.11 to show compliance with the opacity limit.

h. The Permittee may use the following as alternatives to the reference methods and procedures specified in Condition II.C.3:

[40 CFR 60.675.e]

(1) For the method and procedure of Condition II.C.3.c, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility

cannot be read, either of the following procedures may be used:

(a) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(b) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

(a) No more than three emission points may be read concurrently.

(b) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(c) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I may be used to determine the PM concentration as an alternative to the methods specified in Condition II.C.3.b(1). Method 5I may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

i. To comply with Condition II.C.2.g(2), the Permittee shall record the measurements as required in Condition II.C.2.g(1) using the monitoring devices in Conditions II.C.2.c(1) and (2) during each particulate matter run and shall determine the averages.

[40 CFR 60.675(f)]

j. For performance tests involving only Method 9 testing, the Permittee may reduce the 30-day advance notification of performance test in 40 CFR 60.7(a.6) and 60.8(d) to a 7-day advance notification.

[40 CFR 60.675(g)]

k. If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in 40 CFR 60.671) of the affected facility, then with approval from the Director, the Permittee may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

[40 CFR 60.675(i)]

D. Permit Shield

Compliance with of this Section shall be deemed compliance with 40 CFR 60.672(a), (b), (e), & (f), 674(a), (b), (c), & (d), 675(b), (c), (d), (e), (f), (g), & (i), and 676(b), (c), (d), (e), (f), (g) and (i), Table 2 and Table 3 in 40 CFR 60 Subpart OOO.

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

III. CRUSHING AND SCREENING OPERATIONS SUBJECT TO EXISTING SOURCE REQUIREMENTS

A. Applicability

The provisions of this Section are applicable to 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, constructed or modified prior to August 31, 1983.

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

B. Particulate Matter and Opacity

1. Emission Limits/Standards

a. The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere, except as fugitive emissions, in any one hour from any gravel or crushed stone processing plant in total quantities in excess of the amounts calculated by one of the following equations:

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

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

$$E = 4.10\ P^{0.67}$$

Where:

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

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

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

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

Where:

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

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

b. Opacity

The Permittee shall not cause to be discharged into the atmosphere from any gravel or stone crushing processes any emissions greater than 20 percent.

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

2. Air Pollution Controls

a. *Water spray bars or equivalent control equipment shall be used whenever the equipment is operating or material must be adequately wet to minimize visible emissions to the extent practical.*

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

b. Spray bar pollution control shall be utilized 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. *Baghouses, or equivalent, shall be operated in accordance with vendor specifications to control emissions vented by silos during the loading operations*. If vendor specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of each baghouse. A copy of the vendor specifications or the operation and maintenance plan shall be kept on site and made available to ADEQ or the respective AQCD upon request.

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

d. Loading of lime storage silos shall be conducted in such a manner that the displaced air does not by-pass the baghouse and will not be directly vented to the atmosphere.

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

e. The baghouse shall be maintained 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 III.B.2.e(1) through (5).

f. Fugitive emissions from operation of gravel or crushed stone processing shall be controlled in accordance with Section VII of Attachment "B".

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

g. Wet Suppression Systems

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

(1) Water sprays shall be operated and maintained in accordance with the following:

(a) Prior to start-up, the water supply shall be checked, all nozzles shall be inspected, and all associated valves shall be opened;

(b) Following shut-down, all nozzles shall be inspected and all associated valves shall be closed;

(c) The spray system shall be checked daily for performance; and

(d) All nozzles and valves shall be cleaned or replaced as needed.

(2) Water trucks, or the equivalent, shall be operated and maintained in accordance with the following:

(a) Prior to start-up, the water supply shall be checked, all nozzles shall be inspected, and all associated valves shall be opened;

(b) Following shut-down, all nozzles shall be inspected and all associated valves shall be closed;

(c) Safety and equipment checks shall be conducted daily; and

(d) Normal vehicle maintenance shall be performed on a regular or "as needed" basis.

h. The Permittee shall maintain records which demonstrate compliance with the activities listed in Conditions III.B.2.g(1) and (2).

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

3. Monitoring and Recordkeeping Requirements

a. When in operation, the Permittee shall conduct weekly opacity monitoring for the equipment under this Section in accordance with Condition III.F of Attachment "B".

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

b. *The Permittee shall install, calibrate,* maintain, and operate *monitoring devices which can be used to determine daily the process weight of sand, gravel or crushed stone produced. The weighing devices shall have an accuracy of plus or minus 5 percent over their operating range.*

[A.A.C. R18-2-722.F, and A.A.C. R18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

c. 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]

d. For each baghouse equipped with a pressure drop measuring device, the Permittee shall monitor and record once per day the pressure drop (in inches of H_2O) across the baghouse. The records shall include the dates and time each reading was taken.

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

e. The Permittee shall maintain records of the daily production rate of gravel or crushed stone produced.

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

C. Permit Shield

Compliance with Conditions of this Section shall be deemed compliance with A.A.C. R18-2-722.A, 722.B, 722.D, 722.E, 722.F and 722.G.

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

ATTACHMENT "E": SPECIFIC CONDITIONS FOR CONCRETE BATCH PLANTS

I. APPLICABILITY

For the purposes of this permit, the concrete batch plant refers portable or stationary concrete batch plant equipment with the hot mix asphalt plant covered by this air quality control permit.

II. CONCRETE BATCH PLANT REQUIREMENTS

Particulate Matter and Opacity

A. Emission Limits/Standards

1. The Permittee shall not cause to be discharged into the atmosphere from any concrete batch plant processes any plume or effluent which exhibits greater than 20 percent opacity.

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

2. Fugitive dust emissions from the concrete batch plant shall be controlled in accordance with Section VII of Attachment "B".

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

B. Air Pollution Control Requirements

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

1. Cement / Fly Ash / Lime Silos

a. *Baghouses, or equivalent, shall be operated* in accordance with vendor specifications *to control emissions vented by silos during the loading operations.* If vendor specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of each baghouse. A copy of the vendor specifications or the operation and maintenance plan shall be kept on site and made available to ADEQ or the respective AQCD 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. Loading of storage silos shall be conducted in such a manner that the displaced air does not by-pass the baghouse and is not direct-vented to the atmosphere.

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

c. Baghouses shall be maintained 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 II.B.1.c(1) through (5).

2. Product Delivery System

a. *For Concrete Batch Plants utilizing truck-mix operations, 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. Water sprays shall be operated and maintained 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. Water trucks, or the equivalent, shall be operated and maintained 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 II.B.3.a and b.

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

C. Monitoring, Recordkeeping and Reporting Requirements

1. When in operation, the Permittee shall conduct weekly opacity monitoring for the equipment under this Section in accordance with Condition III.F of Attachment "B".

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

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 once per day the pressure drop (in inches of H_2O) across the baghouse. The records shall include the dates and time each reading was taken.

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

D. Permit Shield

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

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

III. 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. Spray bar pollution control shall be utilized 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

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

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

IV. REQUIREMENTS FOR BOILERS

A. Applicability

This Section is applicable to individual boilers with a maximum firing capacity of less than 10 MMBtu per hour.

B. Operating Requirements

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]

C. Fuel Limitation

1. The Permittee shall burn only natural gas, liquefied petroleum gas (butane or propane), on-specification used oil, or ultra-low sulfur diesel fuel in the boiler(s), as identified on the ATO.

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

2. If the Permittee is authorized to burn "on specification" used oil fuel only if it meets the following requirements:

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

(1) The used oil must be analyzed and certified by the marketer (oil supplier) to be "on specification" according to the definition in A.R.S. §49-801;

(2) The flash point shall be at least 100°F; and

(3) The contaminants must not exceed the levels (in parts per million by weight) provided in Table 5:

Table 5: Contaminants Limits

Name of Pollutant	Limit
Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
Halogens	1000 ppm
PCBs	2 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 I.C.2.c of Attachment "C" are not exceeded.
[A.A.C. R18-2-306.A.3.c]

D. Particulate Matter and Opacity

1. Emission Limitations

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

$E = 1.02Q^{0.769}$

Where:

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

Q = the heat input in million Btu per hour.

b. 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 keep records of fuel supplier certifications. The certification shall contain information regarding the name of fuel supplier and lower heating value of the fuel. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c]

b. The Permittee shall conduct monthly opacity monitoring of visible emissions emanating from the stack of the boilers, when in operation, in accordance with Condition III.F of Attachment "B". Opacity monitoring is not required for natural gas fired boilers.

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

3. Permit Shield

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

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

E. Sulfur Dioxide

1. Emission Limitations and Standards

a. The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu.

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

b. While burning diesel fuel, the Permittee shall only burn ultralow sulfur fuel (sulfur content below 15 ppm by weight) in the asphalt heaters.

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

2. Monitoring, Recordkeeping and Reporting Requirements

The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit in Condition IV.E.1.b.

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

3. Permit Shield

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

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

F. Hazardous Air Pollutants – Oil-Fired Boilers

1. Applicability

a. The requirements of this part are applicable to oil-fired boilers identified as subject to NESHAP 40 CFR 63 Subpart JJJJJJ on the respective ATO.

[40 CFR 63.11194]

b. For the purpose of this Part, a new boiler is one which commenced construction or reconstruction after June 10, 2010.

[40 CFR 63.11194(c)]

c. For the purpose of this Part, an existing boiler is one which commenced construction or reconstruction on or before June 10, 2010.

[40 CFR 63.11194(b)]

2. Compliance Dates

[40 CFR 63.11196]

The Permittee shall be in compliance with the requirements of this Section at the issuance of this permit.

3. 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 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

(1) Existing Boiler Tune Up

Tune-ups shall be conducted biennially and shall be conducted no more than 25 months after the previous tune-up.

[40 CFR 63.11223.a]

(2) New Boiler Tune Up

For new boiler, the Permittee is not required to complete an initial performance tune-up. The Permittee shall complete the applicable biennial tune-up as specified Condition IV.F.3.c no later than 25 months after the initial startup.

[40 CFR 63.11210.g]

c. Tune-up Procedures

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

[40 CFR 63.11233.b]

(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).

(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.

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (this may be delayed until the next scheduled unit shutdown, but the burner must be inspected at least once every 36 months).

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

(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). Measurements may be taken using a portable CO analyzer.

(6) Maintain onsite and submit, if requested by the Director, a report containing the information in the following conditions:

(a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(b) A description of any corrective actions taken as a part of the tune-up of the boiler.

(c) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

4. Notification, Reporting and Recordkeeping Requirements

a. The Permittee shall prepare by March 1 and submit to the Director upon request, a biennial compliance certification report as specified in below: [63.11225(b)]

(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart JJJJJJ.

(3) The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: “This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial tune-up, as applicable, of each boiler.”

b. The Permittee shall keep the following records to document continuous compliance conformance with the tune up requirements: [40 CFR 63.11225(c)]

(1) The Permittee shall keep a copy of each notification and report that was submitted to comply with this 40 CFR 63 Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted.

(2) The Permittee shall keep records to document conformance with the work practices, and management practices required by 40 CFR §63.11214 and §63.11223 as specified below:

(a) Records shall identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;

(b) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment; and,

(c) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition IV.F.3.a, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

5. Permit Shield

Compliance with this Part shall be deemed compliance with 40 CFR 63.11194(b) and (c), 63.11196, 63.11205.a, 63.11210.c & g, 11214(b), 63.11223.a & b, and 63.11225(a)(4), (b) &(c).

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

V. DIRECT-FIRED FUEL BURNING EQUIPMENT

A. Applicability

This Section is applicable to 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.

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

C. Particulate Matter and Opacity

1. Emission Limitations and Standards

The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere, in any one hour, from direct-fired 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:

$$E = 4.10\ P^{0.67}$$

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

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

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

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

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

Where, "E" and "P" are defined in condition above.

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

2. Opacity

The opacity of any plume or effluent shall not be greater than 20 percent.

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

D. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-702.B.3, -730.A.1.a, and b.

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

ATTACHMENT "F": ADDITIONAL REQUIREMENTS FOR SOURCES OPERATING IN MARICOPA COUNTY

I. FACILITY WIDE LIMITATION

A. Applicability of Multiple Permit Conditions

While operating in Maricopa County, the Permittee shall also comply with the conditions set forth in this Attachment.

B. Opacity Standard

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 percent opacity for a period aggregating more than three minutes in any 60 minute period.

[Maricopa County Rule 300 §301]

C. Gaseous and Odorous Emissions

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.

[Maricopa County Rule 320 §300]

D. 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]

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

The Permittee shall provide, properly install and maintain in calibration, in good working order, and in operation air pollution control equipment required by Maricopa County Rule 316. When selecting air pollution control equipment required by Maricopa County Rule 316, the Permittee may consider the site-specific and/or material-specific conditions and

logistics of a facility. When doing so, some air pollution control equipment may be more reasonable to implement than others. Regardless, any air pollution control equipment that is installed must achieve the applicable standard(s) required by Maricopa County Rule 316, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in Maricopa County Rule 316. The Permittee may submit a request to the Director and the Administrator for the use of alternative air pollution control equipment. The request shall include the proposed alternative air pollution control equipment, the air pollution control equipment that the alternative would replace, and a detailed statement or report demonstrating that the air pollution control equipment would result in equivalent or better emission control than the equipment prescribed in Maricopa County Rule 316. Nothing in Maricopa County Rule 316 shall be construed to prevent the Permittee from making such demonstration. Following a decision by the Director and the Administrator to grant the Permittee shall incorporate the alternative air pollution control equipment in any required Operation and Maintenance (O&M) Plan.

[Maricopa County Rule 316 §305]

For each ECS that is used to comply with Maricopa County Rule 316 or an air pollution control permit, the Permittee shall:

1. 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 Rule 316 or an air pollution control permit. The O&M Plan(s) shall include all of the following information:

   [Maricopa County Rule 316 §305.1.a]

   a. ECS equipment manufacturer name and model designation;

   b. ECS equipment serial number, or a unique identifier assigned by the owner; and

   c. 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.

   d. Descriptions of maintenance procedures that will be performed on each ECS and ECS monitoring device and the frequency of each maintenance procedure.

2. 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]

3. *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]

4. Fully comply with all identified actions and schedules provided in each O&M Plan.
[Maricopa County Rule 316 §305.1.d]

5. Upon receipt of written notice from the Director that an O&M Plan is deficient or inadequate, submit a revised O&M Plan to the Director within 5 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 O&M Plan, the Permittee shall comply with all requirements of Maricopa County Rule 316.
[Maricopa County Rule 316 §305.1.e]

F. Monitoring, Recordkeeping, and Reporting Requirements

1. Opacity Monitoring

The Permittee shall conduct a weekly monitoring of visible emissions from the single source and fugitive dust sources as per the opacity monitoring requirements specified in Condition III.F, Attachment "B".
[A.A.C. R18-2-306.A.3.c]

2. Operational Recordkeeping

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 Maricopa County Rule 316 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 Maricopa County Rule 316 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) General Data

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

(a) Hours of operation;

(b) Type of batch operation (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 Section 307.6(a) and Section 307.6(e)(1) of Maricopa County Rule 316, 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 Section 301.2(d) of Maricopa County Rule 316.

[Maricopa County Rule 316 §501.2.a]

(2) Soil Moisture Testing:

(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 Section 301.2(c) of Maricopa County Rule 316.

[Maricopa County Rule 316 §501.2.b]

c. O&M Plan Records

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 Maricopa County Rule 316 or Under an Air Pollution Control Permit:

[Maricopa County Rule 316 §501.3.a]

(1) Periods of time that an approved ECS is operating to comply with the conditions in this permit;

(2) Periods of time that an approved ECS is not operating;

(3) Flow rates;

(4) Pressure drops;

(5) Other conditions and operating parameters necessary to determine if the approved ECS is functioning properly;

(6) Results of visual inspections;

(7) Correction action taken, if necessary; and

(8) 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]

G. Compliance Determination for Process Emissions and Controls

[Maricopa County Rule 316 §502]

Compliance determinations for activities regulated by Sections 301 (excluding Section 301.1(b)(3)), 302, and/or 303 of Maricopa County Rule 316 shall be made according to the test methods for those subparts of 40 CFR Part 60, Appendix A, as listed below. Such subparts of 40 CFR Part 60, Appendix A and 40 CFR Part 51, Appendix M are incorporated by reference as indicated. The EPA test methods as they exist in the CFR, as listed below, are incorporated by reference in Appendix G of these rules. This incorporation by reference includes no future editions or amendments. Copies of test methods referenced in Section 502 of Maricopa County Rule 316 are available at the Maricopa County Air Quality Department. When more than one test method is permitted for a compliance determination, then an exceedance of the limits established in Maricopa County Rule 316, determined by any of the applicable test methods, constitutes a violation of Maricopa County Rule 316.

1. Grain Loading

Particulate matter and associated moisture content shall be determined using the applicable EPA Reference Method 5, 40 CFR Part 60, Appendix A.

[Maricopa County Rule 316 § 502.1]

2. Opacity Observations

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 Maricopa County Rule 316 shall be conducted in accordance with the techniques specified in EPA Reference Method 203B (Visual Determination of Opacity of Emissions from Stationary Sources for Time-Exception Regulations), 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 Maricopa County Rule 316 for a period aggregating more than three minutes in any 60-minute period.

[Maricopa County Rule 316 § 502.2]

H. Permit Shield

Compliance with the conditions of this Section 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 300 §301, Maricopa County Rule 320 §300, §302, and §303, Maricopa County Rule 316 §305, §305.1, §501, §501.1, §501.2, §501.3, §502, §502.1, and §502.2.

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

II. HOT MIX ASPHALT PLANT

Particulate Matter (PM)

A. Emission Limitations/Standards

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

[Maricopa County Rule 316 § 302.1]

1. When producing non-rubberized asphaltic concrete, stack emissions:

   a. Exceeding 5% opacity; or

   b. Containing more than 0.04 gr/dscf (90 mg mg/dscm) of particulate matter.

2. When producing rubberized asphaltic concrete, stack emissions:

   a. Exceeding 20% opacity; or

   b. Containing more than 0.04 gr/dscf (90 mg/dscm) of particulate matter;

3. When producing rubberized asphaltic concrete, fugitive emissions of blue smoke from the drum dryer exceeding 20% opacity.

4. Fugitive dust emissions exceeding 10% opacity from any affected operation, or process source, excluding truck dumping.

5. Fugitive dust emissions exceeding 20% opacity from truck dumping directly into any asphalt plant feed hopper.

B. Air Pollution Control Requirements

The Permittee shall control and vent exhaust from all drum dryers to a properly sized fabric filter baghouse.

[Maricopa County Rule 316 § 302.2]

C. Monitoring, Record Keeping and Reporting Requirements

The Permittee shall meet all of the applicable monitoring and recordkeeping requirements specified in Condition I.F of this Attachment, and the requirements in Section I of Attachment “C”.

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

D. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Maricopa

County Rule 316 § 302.

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

III. INTERNAL COMBUSTION ENGINES

A. Applicability

1. This Section applies to any spark-ignition engine or compression-ignition engine including stationary RICE used in cogeneration, with a rated brake horsepower (rated bhp) of greater than 125. This Section also applies to a combination of stationary RICE each with a rated bhp greater than 50 used at a source, whose maximum aggregate rated bhp is greater than 125.

   [Maricopa County Rule 324 §102.1]

2. In addition to this Section, a stationary RICE may be subject to New Source Performance Standards (NSPS) in Condition V and VI of Attachment "B" and/or National Emission Standards for Hazardous Air Pollutants (NESHAP) in Condition IV of Attachment "B".

   [Maricopa County Rule 324 §102.2 and 102.3]

3. Exemptions

   a. The following types of stationary RICE are exempt from all of the requirements of Maricopa County Rule 324 but shall comply with Rule 300 (Visible Emissions) of these rules:

      [Maricopa County Rule 324 §103]

      (1) A stationary RICE used directly and exclusively for engine research including engine development, and subsequent engine performance verification for the purpose of either engine emission control techniques or engine efficiency improvements.

      [Maricopa County Rule 324 §103.1]

      (2) A non-emergency engine when it is operated by a manufacturer or distributor of such equipment for the purpose of performance verification and testing at the production facility.

      [Maricopa County Rule 324 §103.2]

      (3) A compressed gas stationary RICE used for solar testing and research programs.

      [Maricopa County Rule 324 §103.3]

      (4) A stationary RICE test stand used for evaluating engine performance.

      [Maricopa County Rule 324 §103.4]

4. Partial Exemptions for Emergency Engines

   A stationary RICE operated as an emergency engine, as defined in Section 200 of Maricopa County Rule 324, for any of the following reasons shall be exempt from Conditions III.C, III.D.1, III.D.2, and III.D.3 when:

   [Maricopa County Rule 324 §104]

   a. Used only for power when normal power service fails from the serving

utility or if onsite electrical transmission or onsite power generation equipment fails.

b. Used only for the emergency pumping of water resulting from a flood, fire, lightning strikes, police action or for any other essential public services which affect public health and safety.

c. Used for lighting airport runways.

d. Used for sewage overflow mitigation and/or prevention.

e. Used for reliability-related activities such as engine readiness, calibration, or maintenance or to prevent the occurrence of an unsafe condition during electrical system maintenance, as long as the total number of hours of the operation does not exceed 100 hours per calendar year per engine as evidenced by an installed non-resettable hour meter. For the purposes of this Section, hours of operation during the commissioning period do not count towards the 100 hour per calendar year limit on hours of operation for reliability-related activities.

f. Used as the non-emergency engine when the non-emergency engine has failed, but only for such time as is needed to repair the non-emergency engine. For the purposes of this exemption, if the non-emergency engine is not repaired and returned to service within 12 months, or if the emergency engine is used as the non-emergency engine for more than 50 hours, whichever occurs first, the emergency engine shall be reclassified as a non-emergency engine and shall comply with all requirements of this Section that are applicable to non-emergency engines.

g. Used to operate standby emergency water pumps for fire control that activate when sensors detect low water pressure.

5. Partial Exemptions for Low Usage Non-Emergency Engines

The following low usage non-emergency engines onsite and in use before June 23, 2021 shall be exempt from Conditions III.C, III.D.1, III.D.2, III.D.3, and III.E.6 of this attachment.

[Maricopa County Rule 324 §105]

a. Each engine with a rated bhp at or below 1000 that operates less than 200 hours per calendar year as evidenced by an installed non-resetting totalizing hour meter.

b. Each engine with a rated bhp above 1000 that operates less than 100 hours per calendar year as evidenced by an installed non-resetting totalizing hour meter.

6. Partial Exemption for Nonroad Engines

[Maricopa County Rule 324 §106]

Each nonroad engine shall comply with Maricopa County Rule 300 and Condition III.E.6 of this Attachment, but shall be exempt from all other requirements of this

Section.

7. If a stationary RICE must be removed from service because such engine does not comply with the emission limits listed in Condition III.C of this attachment, then the stationary RICE shall be removed from service no later than June 23, 2022. The stationary RICE that replaces such engine shall comply with all applicable provisions of this Section upon installation.

[Maricopa County Rule 324 §401]

B. Requirement for all engines

1. Fuel Requirements

The Permittee shall comply with one of the following:

a. Use ultralow sulfur oil, except as provided below:

[Maricopa County Rule 324 §301.1]

(1) Engines that are not subject to 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.

(2) Engines that are subject to 40 CFR 60 Subpart IIII or 40 CFR 63 Subpart ZZZZ shall also comply with the fuel requirements in the applicable subpart.

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

[Maricopa County Rule 324 §301.2]

c. Use gasoline that meets the sulfur standard of 80 ppm as a per-gallon cap.

[Maricopa County Rule 324 §301.3]

d. Use natural gas, liquified petroleum gas (LPG), or any alternative fuel that contains no more than 0.05% sulfur by weight, alone or in combination with other fuels.

[Maricopa County Rule 324 §301.4]

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, include all of the following tuning procedures, if the engines is so equipped, and if such procedures are appropriate to the type of engine:

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 every 12 months (for engines that operate less than 300 hours per year):

[Maricopa County Rule 324 §302.1]

(1) Clean the inlet air filter (if so equipped);

(2) Change oil filter; and

(3) Change the lubricating oil or conduct 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 in 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 .5.

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):

[Maricopa County Rule 324 §302.2]

(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).

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):

[Maricopa County Rule 324 §302.3]

(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.

3. Opacity Standard

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.

[Maricopa County Rule 324 §303]

4. The Permittee of a stationary RICE that is not equipped with a non-resetting totalizing hour meter on June 23, 2021, and is not being removed from service under Condition III.A.7 of this attachment, shall install and operate a non-resetting totalizing hour meter on each such engine no later than June 23, 2022.

[Maricopa County Rule 324 §402]

5. An equivalent replacement engine or an identical replacement engine shall be treated as the original stationary RICE that it replaces for the purposes of compliance with Maricopa County Rule 324.

[Maricopa County Rule 324 §305]

6. *The Permittee of a stationary RICE, Except for those engines being removed from service under Condition III.A.7 of this Attachment, shall install* and operate *a non-resetting totalizing hour meter.* If the non-resetting totalizing hour meter is found to be malfunctioning, operation of the engine shall:

[Maricopa County Rule 324 §306 and A.A.C. R 18-2-331.A.3.c]
[Material permit conditions are indicated by underline and italics]

a. Record hours of operation daily until the function of the hour meter is restored; and

b. Restore the function of the hour meter within two weeks. Or, if it not possible to restore the function of the hour meter within two weeks, the Permittee shall notify the Director in writing and provide a schedule for restoration of the function of the hour meter.

C. Emission Standards for Non-Emergency & Non-Low Usage Non-Emergency Engines

1. The Permittee of a compression-ignition engine that is rated above 250 bhp shall comply with the emission standards in Table 6 below, as applicable, depending on the date the engine was manufactured or reconstructed (whichever occurred later) and the rated brake horse power of the engine:

[Maricopa County Rule 324 §304.1]

Table 6: Compression-Ignition Emission Standards

Compression-Ignition Emission Standards		
Manufacturer or Modified	**Rated BHP**	**Engine Requirements***
Prior to October 22, 2003	250-399	770 ppmdv 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 ppmdv 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 ppmdv or 6.9 g/bhp-hr; 1,000 ppmdv CO; 0.40 g/bhp-hr PM

* Part(s) per million, dry volume (ppmdv): a unit of proportion equal to 10^{-6} that is measured on a dry basis (minus water) at 15% oxygen.

2. The Permittee of a spark-ignition engine that is rated above 250 bhp shall comply

with the emission standards in Table 7 below of this Attachment, as applicable, depending on the date the engine was manufactured or reconstructed (whichever occurred later) and whether it is a lean-burn or rich-burn engine:

[Maricopa County Rule 324 §304.2]

Table 7: Spark-Ignition Emission Standards

Spark-Ignition Emission Standards			
Lean-Burn Engines			
Manufactured or Modified	**Nitrogen Oxides (NO_X)****	**Volatile Organic Compounds (VOC)****	**Carbon Monoxide (CO)****
Prior to October 22, 2003	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	110 ppmvd or 1.5 g/bhp-hr	Not Applicable	4,500 ppmvd
Rich Burn Engines			
Prior to October 22, 2003	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	20 ppmvd or 0.30 g/bhp-hr	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.
** Part(s) per million, dry volume (ppmdv): a unit of proportion equal to 10-6 that is measured on a dry basis (minus water) at 15% oxygen.

D. Compliance Determination

1. Non-Emergency and Non-Limited Use Non-Emergency Engine Requirements

The Permittee of an engine subject to the requirements in Condition III.C of this Attachment shall demonstrate compliance using one of the following methods, as applicable:

[Maricopa County Rule 324 §501.1]

a. Provide documentation that the stationary RICE is certified by the manufacturer to comply with emission limits in 40 CFR 60 Subpart IIII or 40 CFR 60 Subpart JJJJ that are more stringent than the applicable emission limits in Condition III.C of this Attachment, and provide documentation that the engine is installed, operated, and maintained in accordance with the manufacturer's specifications.

b. Conduct a performance test in accordance with Condition III.D.3 of this Attachment at least once every 5 years. The performance test shall demonstrate compliance with one of the following requirements:

(1) The applicable emission limits in units of grams per brake horsepower-hour (g/bhp-hr); or

(2) The applicable emission limits in units of ppmvd; or

(3) The three-way catalyst provides a minimum of 80% control efficiency for NO_X and CO for engines fueled with natural gas,

propane or gasoline, and the three-way catalyst also provides a minimum of 50% control efficiency for VOC for engines fueled by gasoline.

c. Provide documentation that the non-emergency engine was manufactured or reconstructed (whichever occurred later) prior to October 22, 2003 and provide documentation that the non-emergency compression-ignition engine is equipped with a turbocharger with an aftercooler/intercooler.

d. Provide documentation that the non-emergency compression-ignition engine was manufactured or reconstructed (whichever occurred later) prior to October 22, 2003 and:

(1) Provide documentation that the injection timing has been set at 4 degrees below the factory setting for the engine. Written verification of the factory set timing, along with documentation that the engine timing has been delayed by 4 degrees must be submitted; or

(2) Provide documentation that the injection timing has been set at 4 degrees below the manufacturer's standard timing of the engine. Written verification of the manufacturer's standard timing of the engine prior to tuning for NO_X control, along with documentation that the timing has been delayed by 4 degrees must be submitted; or

(3) Provide documentation that the injection timing has been set at 16 degrees below top dead center or less (if information regarding the manufacturer's standard timing or factory set timing is not available).

2. Representative Performance Testing

The Permittee may demonstrate compliance with the applicable emission limits or control efficiency requirements in Condition III.C of this Attachment by conducting representative performance testing in accordance with Condition III.D.3 of this Attachment, provided all of the following requirements are satisfied:
[Maricopa County Rule 324 §501.3]

a. The engines are located at the same stationary source;

b. The engines were produced by the same manufacturer, have the same model number or other manufacturer's designation in common, have the same rated capacity and operating specifications;

c. The engines are operated and maintained in a similar manner;

d. At least one engine or one third of the engines in the specified group, whichever is greater, are tested each time a performance test is required;

e. Each time a performance test is required, different engines are tested so that

all engines in the specified group are tested before any engines in the representative group are retested; and

f. If emissions from any engine in the specified group exceed an applicable emission limit, or if the control efficiency for any pollutant controlled by a three-way catalyst is lower than the required control efficiency, the Permittee shall demonstrate that each engine in the specified group is in compliance with the applicable limits by conducting a performance test on each engine in the specified group.

3. Performance Test Conditions

Performance tests shall be conducted using the test methods listed in Section 503 of Maricopa County Rule 324. Testing for stationary RICE shall be completed at either the maximum operating load or no less than 80% of the rated bhp. If the Permittee demonstrates to the Director that the engine cannot operate at these conditions, then emissions source testing shall be performed at the highest achievable continuous rated bhp or under the typical duty cycle or typical operational mode of the engine. The result of the performance test shall be the arithmetic mean of the result of the three test runs. Each test run shall have a minimum sample time of one hour.

[Maricopa County Rule 324 §501.4]

4. Fuel-Sulfur Verification

The Permittee of an engine fueled with gasoline shall submit documentation that gasoline was purchased within the United States. The Permittee of an engine fueled with diesel, natural gas, LPG, or an alternative fuel shall submit one of the following documents listing the accurate sulfur content of the fuel based on enforceable test methods as approved by the Administrator to determine the sulfur content:

[Maricopa County Rule 324 §501.5]

a. Fuel receipts, or

b. Contract specifications, or

c. Pipeline meter tickets, or

d. Fuel supplier information, or

e. Purchase records, or

f. Test results of the fuel for sulfur content

5. Waste Derived Fuel Gas – Sulfur Verification

The Permittee shall submit documentation of the sulfur content of the waste derived fuel gas to the Director upon request. The sulfur content of gaseous fuels shall be determined by South Coast Air Quality Management District Method 307-91 Determination of Sulfur in a Gaseous Matrix.

[Maricopa County Rule 324 §501.5]

E. Recordkeeping Requirements

The Permittee shall comply with the following requirements and retain records for at least 5 years:

[Maricopa County Rule 324 §502]

1. 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 Director upon request.

   [Maricopa County Rule 324 §502.1]

2. Operation Records

   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:

   [Maricopa County Rule 324 §502.2]

   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.

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 demonstrates compliance with Condition III.C.1 using the method specified in Condition III.D.1.d of this attachment, the maintenance record shall include documentation of the injection timing setting each time maintenance is performance 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:

   [Maricopa County Rule 324 §502.3]

   a. The manufacturer's written instructions for operations 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 Condition III.B.2 of this attachment are applicable to each stationary RICE.

4. Fuel Records

[Maricopa County Rule 324 §502.4]

a. Maintain records of the type and amount of fuel purchased for use in the stationary RICE (e.g. receipts, pipeline tickets, or bills of loading); and

b. 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.

5. Manufacturer's Operation and Maintenance Instructions

[Maricopa County Rule 324 §502.5]

The Permittee that is subject to Condition III.B.2 of this Attachment shall keep 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 Condition III.B.2 of this attachment are appropriate to the engine, available at the facility where the engine is located at all times.

6. Nonroad Engine Records

The permittee shall maintain the following records for each non-road engine:

[Maricopa County Rule 324 §502.6]

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; and

(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.

F. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with the Maricopa County Rules: 324 § 301, 302, 303, 304, 305, 306, 401, 402, 501 and 502.

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

IV. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Emission Limitations

The Permittee 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 Section 503 of Maricopa County Rule 316 and in Appendix C-Fugitive Dust Test Methods of these rules.

[Maricopa County Rule 316 §306.1]

2. Visible Emission Limitation Beyond Property Line

The Permittee shall not discharge, 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 in Conditions IV.B.1 and IV.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 IV.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 Section 501.4 of Maricopa County Rule 316; 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 IV.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 IV.E.2.b of this Attachment.

(b) Cover open storage pile with tarps, plastic, or other material such that wind will not remove the covering, if open storage pile is less than eight feet high.

[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 IV.E.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/ft^2 for unpaved roads, unpaved parking lots, and unpaved staging areas. However, if silt loading is equal to or greater than 0.33 oz/ft^2, 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 IV.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 IV.C.1 through IV.C.12 below, as applicable. When selecting a fugitive dust control measure(s), the Permittee may consider the site-specific and/or material-specific conditions and logistics of a facility. When doing so, some fugitive dust control measures may be more reasonable to implement than others. Regardless, any fugitive dust control measure that is implemented must achieve the applicable standard(s) described in Condition IV.B, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in Maricopa County Rule 316. The Permittee may 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 Maricopa County Rule 316. Nothing in Maricopa County Rule 316 shall be construed to prevent the Permittee from making such demonstration. Following a decision by the Director and the Administrator to grant the petition, the facility shall incorporate the alternative control measure in any required Dust Control Plan.

[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 IV.B.1 through IV.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 IV.B.1, IV.B.2, and IV.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:

[Maricopa County Rule 316 §307.1.c]

(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.

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 IV.C.3 or IV.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 IV.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 IV.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 IV.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.

[Maricopa County Rule 316 §307.6.a]

(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 IV.C.6.a(1) through IV.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) The Permittee 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 IV.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 IV.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) The Permittee 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 Maricopa County Rule 316. The Permittee 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. The Permittee shall keep records in accordance with Section 500 of Maricopa County Rule 316, as applicable. The Permittee 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 Permittee shall comply with Condition IV.C.6 of this Attachment, as applicable.

[Maricopa County Rule 316 §307.6.c(4)]

(5) The Permittee shall not be required to install, maintain, or use a wheel washer, rumble grate, or other trackout control device specified in Conditions IV.C.6.a through IV.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 Condition I.E of this Attachment;

(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 PM_{10} 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.

f. Spillage: An owner, operator, or person subject to Maricopa County Rule 316 shall comply with the following requirements:

[Maricopa County Rule 316 §307.6.f]

(1) Maintain all spillage in a stabilized condition with dust suppressants until removal.

(2) Clean-up all spillage at the end of the work day.

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 IV.C.1 through IV.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 IV.C.10.b(1) or Condition IV.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 Permittee 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 IV.C.10.c(1) or Condition IV.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 Maricopa County Rule 316, 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

[Maricopa County Rule 316 §309.1]

b. Be trained in accordance with the Comprehensive Dust Control Training Class conducted or approved by the Director, successfully 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 §309.2]

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 PM_{10} 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 IV.D.1.b of this Attachment, shall satisfy the requirement of Condition IV.D.2 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 weekly 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 X.A of Attachment "A".

4. Dust Control Plan

a. The Permittee shall submit, to the Director, a Dust Control Plan that includes, at a minimum, the following information:

[Maricopa County Rule 316 §311.1]

(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 Maricopa County Rule 316, 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 Maricopa County Rule 316 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 Maricopa County Rule 316; and

(e) Identification of the applicable minimum soil moisture content required by Section 301.2(c) of Maricopa County Rule 316 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;7

(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 Permitee, 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 Maricopa County Rule 316 and, therefore, a revised Dust Control Plan is required.

e. The Permittee who receives a notice as described in Condition IV.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 Maricopa County Rule 316.

[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 Maricopa County Rule 316.

[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 IV.D.1 and IV.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 IV.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 IV.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/ft^3 (2,700 kN-m/m^3))"), 2002 edition.

(3) 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 IV.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]

V. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

1. Applicability

a. This Section applies to abrasive blasting operations except those covered in Condition V.A.1.b.

[Maricopa County Rule 312 §102]

b. This Section does not apply to following:

[Maricopa County Rule 312 §103.1 and 2]

(1) 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

(2) 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 V.A.3 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 Emission Control System.

5. Requirements for Emission Control System (ECS) and Monitoring Devices:

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

(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
[Maricopa County Rule 312 §304.2]

The Permittee operating an ECS pursuant to this Section 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.

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 be considered to have occurred if any cumulative period of 15-second increments totaling more than three minutes within any sixty minute period was in excess of the opacity standard.
[Maricopa County Rule 312 §305]

7. Wind Event

No dry unconfined abrasive blasting operation shall be conducted during a wind event.
[Maricopa County Rule 312 §306]

8. Traffic Markers

Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting operations shall be performed by wet blasting, hydroblasting or vacuum blasting. Dry blasting may be performed using only certified abrasives when:
[Maricopa County Rule 312 §307]

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

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

9. Work Practices

[Maricopa County Rule 312 §308]

a. Unconfined Blasting

The Permittee shall clean up spent abrasive material with a potential to be transported during a wind event and, until removal occurs, shall at a minimum, meet the provisions of this Section.

b. Confined Blasting

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

10. Monitoring, Recordkeeping and Reporting

At a minimum, the Permittee subject to this Section 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

[Maricopa County Rule 312 §502]

Copies of reports, logs, and supporting documentation required by this Condition shall be retained for at least 2 years.

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 this Section.

[Maricopa County Rule 312 §505.2]

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

[Maricopa County Rule 312 §505.3]

14. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with Maricopa County Rule 312 §102, 103, 301, 302, 303, 304, 305, 306, 307, 308, 501,

502, 503, 505, and 506.

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

B. Painting Operations

1. Surface Coating and architectural Coating Operations

To limit the emission of volatile organic compounds (VOCs) from surface coating operations and architectural coating operations, the Permittee shall comply with all the applicable requirements in Maricopa County rules 335 and 336.

[Maricopa County Rule 335 and 336]

2. Spray Coating Operations

a. Controls Required

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

[Maricopa County Rule 315 §301]

(1) Equipment Operated in Enclosures Located Outside a Building:

[Maricopa County Rule 315§301.1]

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

(a) 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.

(b) More Complete Enclosures:

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

(2) Equipment Operated with Forced Air Exhaust Vented Directly Outside:

[Maricopa County Rule 315§301.2]

Any spray booth or enclosure with forced air exhaust must have a filtering system with average overspray removal efficiency of at least 92 percent 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.

b. Exemptions

[Maricopa County Rule 315 §302]

The controls required in Condition V.B.2 shall not apply to the following:

(1) To the spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating.

(2) 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.

(3) To the spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10′W × 25′L × 8′H.

(4) 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.

(5) To any coating operations utilizing only hand-held aerosol cans.

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with Maricopa County Rules 315 § 301 and 302, Rules 335 and 336.

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

ATTACHMENT "G": ADDITIONAL REQUIREMENTS FOR SOURCES OPERATING IN PIMA COUNTY

I. GENERAL CONDITIONS

While operating in Pima County the Permittee shall also comply with the conditions set forth in this Attachment.

A. Applicability of more than one standard

While operating in Pima County the Permittee shall comply with the Conditions set forth in Attachments “B”, “C”, “D” and this Attachment. 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 Attachments "B", “C”, and “D” 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.

[P.C.C. §17.16.010.A-B]

B. Pollution Controls

[P.C.C. §17.13.020.A.3.c & §17.16.010]

1. The Permittee shall install and operate baghouses and/or dust collectors on all pneumatically-loaded silos and load-out operations according to manufacturer’s recommendations and specifications. If there are no manufacturer’s recommendations and specifications available for the controls, the Permittee shall prepare an Operations and Maintenance Plan that includes all equipment maintenance and operation specifications for the baghouses and dust collectors.

2. The Permittee shall demonstrate compliance by examining the condition of the baghouses, spray bars, and nozzles each time that maintenance is performed. Baghouse filters, spray bars, and nozzles shall be checked to ensure they are maintained according to the manufacturer’s recommendations and specifications or the Permittee’s in-house Operations and Maintenance Plan. Observational results of these checks shall be recorded by the Permittee in a log.

3. At least once each day, the Permittee shall observe and record all visible emission check results including EPA reference Method 9 observations (if applicable), excess emissions, and permit deviations for sources listed in the ATO. If no visible emissions are observed, the record shall reflect this. Records of such checks shall include the information required in Section XI of Attachment A of this permit.

C. Process Weight Determination Requirement

[P.C.C. §17.13.020.A.3.c]

The Permittee shall install, calibrate, maintain, and operate monitoring devices which can be used to determine daily the process weight of materials produced in plants covered by this permit. The weighing devices shall have an accuracy of ± 5 percent over their operating range.

1. A specific procedure to determine the daily process weight rate of the material being processed shall not be required unless the Control Officer has reason to believe a violation of the standard has been committed.

2. The Permittee shall maintain a record of daily production rates of materials produced and all calibration and maintenance records of the monitoring devices used to determine compliance.

D. 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.

[P.C.C. §17.16.010.C]

II. HOT MIX ASPHALT PLANT REQUIREMENTS

A. Applicability

This Section is applicable to fixed asphalt concrete plants and portable asphalt concrete plants.

B. Operational Limitations

When using recycled asphalt in the production of hot mix asphalt in co-current asphalt plants, the percentage of recycled asphalt used as a portion of the aggregate shall not exceed 50% or the percentage used during the performance test, whichever is less. Compliance with this condition shall be demonstrated by the Permittee keeping daily production records used to produce monthly production totals of hot mix asphalt and the percentage of recycled asphalt in the aggregate. A rolling, twelve-month total of production tonnage will be created and updated within 10 calendar days of the end of the month.

[P.C.C. §17.13.020.A.3.c]

C. Permit Shield

Compliance with Conditions of this Section shall be deemed compliance with P.C.C. § 17.16.210.

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

III. CRUSHING AND SCREENING REQUIREMENTS

A. Applicability

The provisions of this Section 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.

[P.C.C. §17.16.370.A]

B. Particulate Matter and Opacity

1. The opacity of any plume or effluent shall not be greater than the opacity limit in Table 8 of this Attachment.

[P.C.C. §17.16.710]

2. Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance with Attachment B, Section VII of this permit and Section V of this Attachment.

[P.C.C. §17.16.370.E]

C. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with P.C.C. §17.16.370 and §17.16.710.

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

IV. CONCRETE BATCH PLANT REQUIREMENTS

A. Emission Limitations

Fugitive Emissions from gravel or crushed stone processing plants shall be controlled in accordance with Attachment B, Section VII of this permit and Section V of this Attachment.

B. Permit Shield

Compliance with the Conditions of this Section shall be deemed compliance with PCC §17.16.380.

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

V. FUGITIVE DUST AND VISIBILITY REQUIREMENTS

A. Visibility Emission Standards (Opacity)

[P.C.C. §17.16.040]

1. 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 8 of this Attachment, or as otherwise specified in this permit, subject to the following provisions:

   a. Opacities (optical densities), as measured in accordance with Method 9, of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument.

   b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be as specified in Table 1 of this Attachment. 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.

Table 8: Opacity Limits

Type of Source	Instantaneous Opacity Measurements			Maximum Allowable Average Opacity, percent
	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
Asbestos-Containing Operation [3]	25	0	25	0
Incinerators	27	2	25	20
Other Sources [4]	25	0	25	20

[1] Applicable to the first 10 consecutive minutes after starting up a diesel engine.
[2] Applicable to a diesel engine being accelerated under load.
[3] Applicable to an asbestos mill, manufacturing or fabrication operation which uses asbestos as a raw material, or spraying operation which sprays materials containing more than one percent asbestos by weight.
[4] Any source not otherwise specifically covered within this table.

c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.

d. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements of this article, this article shall not apply.

2. Visibility Limiting Standard

[P.C.C. §17.16.050.A]

a. The Permittee shall not cause, 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.

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.

c. The Permittee shall not cause or permit the airborne diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions became airborne.

[Pima County SIP Rule 343]

(1) In actual practice, the airborne diffusion of visible emissions across property lines shall be prevented by appropriately controlling the emissions at the point of discharge, or ceasing entirely the activity or operation which is causing or contributing to the emissions.

(2) Condition V.A.2.c shall not apply when the naturally induced wind speed exceeds 25 miles per hour as estimated by a certified visible emission evaluator using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by a U.S. Weather Bureau Section or a U.S. Government military installation.

(3) The exception in Condition V.A.2.c(2) shall not apply to the demolition, destruction, transport, or pulverization of structures containing friable asbestos materials, and all dust producing activities associated with such sources shall be halted when the wind is causing or contributing visible emissions to cross beyond the property lines within which the emissions discharge.

(4) Any disregard of, neglect of, or inattention to other controls required herein, during any time when Condition V.A.2.c is in effect, shall automatically waive the exception in V.A.2.c(2) and such relaxation of controls shall be a violation.

B. Authorization for Fugitive Dust Activities

[P.C.C. §17.14.040F & §17.16.060]

The Permittee is authorized to conduct fugitive dust producing activities and 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.

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

2. 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 this permit.

C. Vacant Lots and Open Spaces

[P.C.C. §17.16.080]

1. 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.

2. No vacant lot, housing plot, building site, parking area, sales lot, playground, livestock feedlot, or other open area- other than those used solely for soil cultivation or vegetative crop- producing and harvesting agricultural purposes- shall be used or left in such a state after construction, alteration, clearing, leveling, or excavation that naturally induced wind blowing over the area causes visible emissions of airborne dust to diffuse beyond the property lines within which the emissions become airborne. Dust emissions must be permanently suppressed by landscaping, covering with gravel or vegetation, paving, or applying equivalently effective controls.

3. 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 cause a violation of visible emission standards under Condition V.A.

D. Roads and Streets

[P.C.C. §17.16.090]

1. 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.

2. Dust emissions from the construction phase of a new road must be minimized by applying the same measures specified in Condition V.D.1.

3. 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.

4. 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 V.A.

5. 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 and/or highway department of the jurisdictional agency.

6. The surfacing of roadways with asbestos tailings is prohibited.

7. The Permittee shall not 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

E. Particulate Materials

[P.C.C. §17.16.100]

1. 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.

2. Dust emissions from construction activity shall be effectively controlled by applying adequate amounts of water or other equivalently effective dust controls.

3. 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.

4. 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.

F. Fugitive Dust Emissions Standards For Motor Vehicle Operation

[P.C.C. §17.16.070]

1. 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.

2. The Permittee shall not operate a motor vehicle for recreational purposes in a dry wash, riverbed or open area in such a way as to cause or contribute to excessive amounts of particulate matter from becoming airborne into a residential, recreational, institutional educational, retail sales, hotel or business premises.

3. Any person found to be in violation of this section shall be guilty of an offense as provided under A.R.S. 49-502.

4. In accordance with the provisions of A.R.S. 49-502, peace officers are authorized to issue a notice to appear for any violation of this Condition V.F. In lieu of issuing a notice to appear, peace officers may file a violation report with the Director, requesting him to file a complaint alleging a violation of this Condition V.F pursuant to A.R.S. 49-502.

G. Storage Piles

[P.C.C. §17.16.110]

1. 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 to prevent excessive amounts of particulate matter from

becoming airborne.

2. Stacking and reclaiming machinery utilized at the storage piles shall be operated at all times with a minimum fall of material and in such a manner, or with use of spray bars and wetting agents, as to minimize and ensure compliance with Condition V.A of this Attachment.

H. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with P.C.C. § 17.16.010, 040, 050, 060, 070, 080, 090, 100, and 110 and SIP Rule 343.

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

ATTACHMENT "H": ADDITIONAL REQUIREMENTS FOR SOURCES OPERATING IN PINAL COUNTY

I. GENERAL CONDITIONS

While operating in Pinal County, the Permittee shall comply with the conditions set forth in this Attachment.

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.

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

III. FUGITIVE DUST EMISSIONS REQUIREMENTS

Particulate Matter Emissions

A. Emission Limitations and Standards

[Pinal Code §4-2-040]

1. The Permittee shall not cause, suffer, allow, or permit a building or its appurtenances, subdivision-site, driveway, parking area, vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, or fill dirt to be deposited, without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.

2. The Permittee shall not disturb or remove soil or natural cover from any area

without taking reasonable precautions to effectively prevent fugitive dust from becoming airborne.

3. The Permittee shall implement the following control measures for blasting operations at a facility:

   a. If wind gusts are above 25 miles per hour, discontinue/cease blasting;

   b. Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

[Pinal Code §4-7-230.N]

B. Additional Requirements for West Pinal County PM_{10} Nonattainment area

[Pinal Code §4-1-030]

1. The Permittee shall not cause or allow visible fugitive dust emissions from open areas/vacant lots (areas not currently utilized for an activity) to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.

2. The Permittee shall erect barriers or no trespassing signs upon evidence of trespass on open areas /vacant lots.

3. The Permittee shall stabilize any open area / vacant lot greater than 1.0 acre that has 0.5 acre or more of disturbed surface and sign up for the Pinal County Dust Control forecast within 30 days of discovery. The open area / vacant lot shall be stabilized the day leading up to and the day that is forecast to be high risk for dust emissions.

4. The Permittee shall not remove vegetation from open areas / vacant lots without applying dust suppressants before and during the weed abatement. Trackout onto paved surfaces must be prevented or eliminated and dust suppressants must be applied following weed abatement to stabilize the entire surface.

5. Stabilization of open areas / vacant lots is determined by the drop ball, threshold friction velocity, flat vegetation or standing vegetation methods listed in PCAQCD Code 4-9-320.

6. The Permittee shall not cause or allow visible fugitive dust emissions from unpaved lots (areas being utilized for an activity) greater than 5000 square feet to exceed 20% opacity based on EPA Method 9 or the continuous plume or intermittent plume methods listed in PCAQCD Code §4-9-340.

7. The Permittee shall not allow silt loading equal to or greater than 0.33 oz/ft^2 or allow the silt content to exceed 8% on unpaved lots greater than 5000 square feet.

8. The Permittee shall stabilize unpaved lots greater than 5000 square feet by paving, applying a dust suppressant or graveling.

9. The Permittee shall clean up trackout on a paved public roadway that exceeds 50 feet within 24 hours of discovery and limit opacity to 20% or less while using a rotary brush or broom.

C. Monitoring and Record Keeping Requirements

[Pinal Code §4-2-050]

1. Opacity observations shall not be made or additional preventive measures required when the wind speed instantaneously exceeds 25 mph or when the average wind speed is greater than 15 mph.

2. The average wind speed determination shall be on a 60 minute average from the nearest Air Quality Control District monitoring station or by a wind instrument located at the site being monitored.

3. The Permittee shall make a record of the control measures applied.

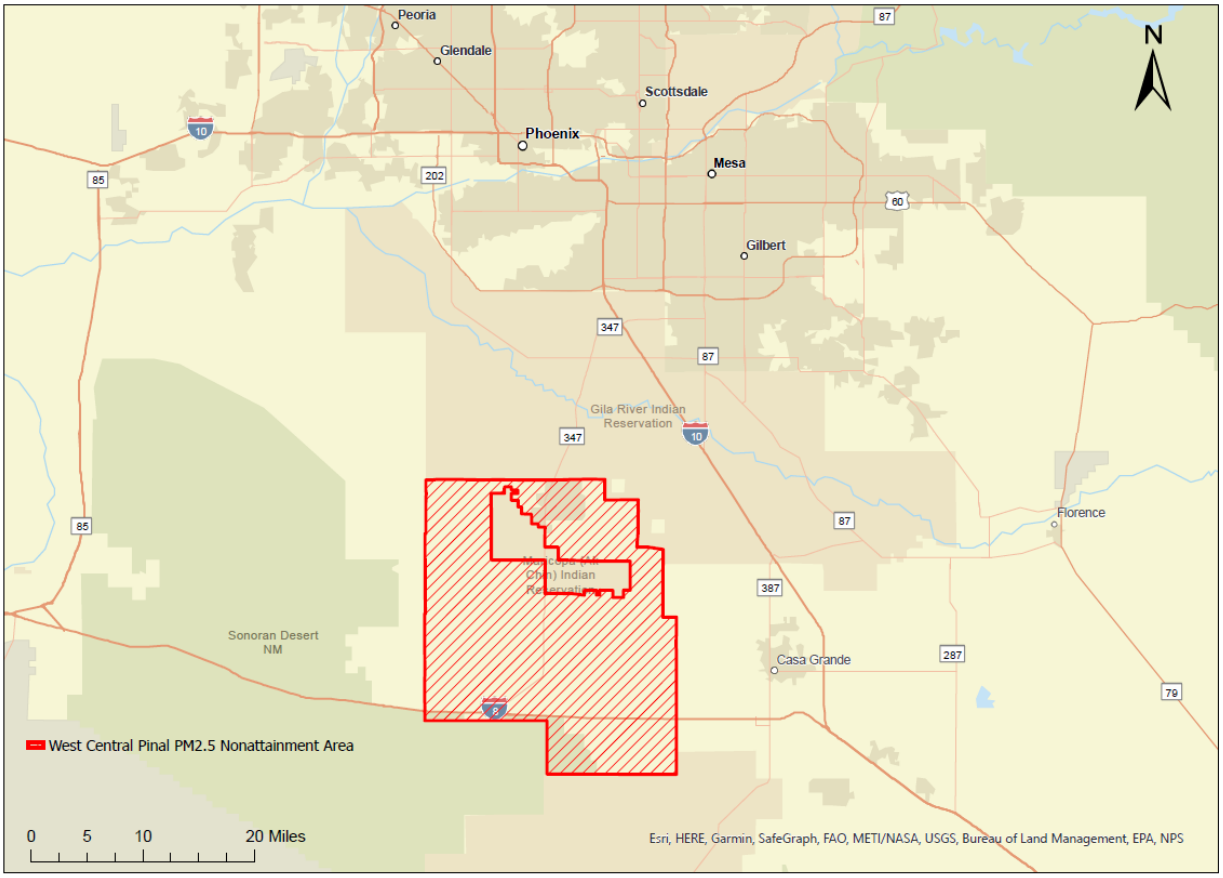
D. Permit Shield

Compliance with the conditions of this shall be deemed compliance with Pinal Code Pinal Code §4-1-030, 4-2-040 and 050.

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

APPENDIX 1 - MAP OF THE PINAL COUNTY PROHIBITED AREA

West Central Pinal PM2.5 Nonattainment Area



APPENDIX 2 - 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*

* Please indicate in remarks when the emission source is not in use.

** Please submit excess emission report to ADEQ for any 6-minute observation that exceeds the applicable opacity standard.