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

AIR QUALITY CONTROL GENERAL PERMIT

for

Crushing and Screening 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", and "E"**

ADEQ GENERAL PERMIT NUMBER **102** PERMIT CLASS **II** EXPIRATION DATE **April 23, 2017**

PERMIT ISSUED THIS _____ DAY OF _____**, 2014**

Eric C. Massey, Director, Air Quality Division
SIGNATURE TITLE

AIR QUALITY CONTROL GENERAL PERMIT
FOR CRUSHING AND SCREENING PLANTS

INTRODUCTION

This general permit covers stationary and portable crushing and screening plants that are subject to federal New Source Performance Standards (NSPS), state regulations, or county regulations. This general permit does not apply to Class I sources.

Owners/operators of crushing and screening plants (non-metallic mineral processing plants) may obtain coverage under this general permit in lieu of an individual permit. This general permit also allows the crushing and screening plant to be collocated with a concrete batch plant. If a concrete batch plant is collocated with a crushing and screening plant both will be covered by this permit. If the concrete batch plant is moved and is not collocated with the crushing and screening plant, the concrete batch plant will require a separate permit.

For sources that operate in Maricopa, Pima or Pinal Counties, references in this document to the "Department" mean the Arizona Department of Environmental Quality (ADEQ) and references to the "Director" mean the Director except as otherwise indicated.

Due to more stringent requirements in the county regulations, sources operating in Maricopa, Pima and Pinal Counties may have additional applicable requirements. Sources operating in these counties must comply with the additional requirements detailed in Attachments "C", "D" and "E" of this general permit in addition to the conditions contained in Attachment “B”.

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ATTACHMENT "A": GENERAL PROVISIONS

AIR QUALITY CONTROL GENERAL PERMIT FOR CRUSHING AND SCREENING GENERAL PLANTS

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 of ADEQ (Director) shall review and may renew this General Permit every five years from its date of issuance. All Permittee's Authorizations to Operate (ATOs) shall coincide with the term of this General Permit, regardless of when the individual authorization began during this five year period, except that the Director may require a Permittee authorized to operate under this General Permit to apply for and obtain an individual permit at any time, if the source is not in compliance with the terms and conditions of this General Permit.

B. At the time that the public notice is required, pursuant to issuance of the proposed General Permit renewal, the Director shall notify in writing all Permittees who have been granted, or who have applications pending for, ATO(s) under this General Permit. The written notice shall describe the source's duty to reapply and may include requests for information required under the proposed General Permit.

II. COMPLIANCE WITH PERMIT CONDITIONS

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

A. The Permittee shall comply with all Conditions of this General Permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance is grounds for enforcement action, for ATO 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.

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 General Permit.

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

[A.A.C.R18-2-321.c and d, and -510]

A. The Director may reopen and reissue, or terminate this General Permit at any time if:

1. The Director has determined that the emissions from the sources in the facility class cause or contribute to ambient air quality standards violations which are not adequately addressed by the requirements in this General Permit, or

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

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

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

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

mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit. [A.A.C. R18-2-321.A.1.c]

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

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

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

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

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

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

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

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

C. 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.

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 at the 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. A copy of the complete General Permit and associated ATO(s) shall be kept on the site.

V. FEE PAYMENT

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

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

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

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

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

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

VII. COMPLIANCE CERTIFICATION

A. The Permittee shall submit to the Director a compliance certification at least once each year and upon request of the Director. The compliance certification shall describe the compliance status of the source with respect to each General Permit condition and the methods used for determining the compliance status. The Permittee shall list on the compliance certification all items of equipment issued ATO(s), on site at the time of annual certification. In addition, this certification shall include a description of any permit deviation.

1. Until the Director makes the myDEQ online portal available to apply for and obtain permits, the certification shall be submitted by October 15th and shall cover the period from September 1 of the previous year to August 31 of the current year.

2. After the Director makes the myDEQ online portal available to apply for and obtain permits, the certification shall be completed and submitted using the myDEQ online portal, and shall be completed upon request of the Director through the portal.

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

B. The compliance certification shall include the following:

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

[A.A.C. R18-2-309.2.c.i]

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

[A.A.C. R18-2-309.2.c.ii]

3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the

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

[A.A.C. R18-2-309.2.c.iii]

4. All instances of deviations from permit requirements reported pursuant to Condition XI.B of this attachment;

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

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

[A.A.C. R18-2-309.2.c.iv]

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

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

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.

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 regulated facility or activity is located or conducted, or where records must be kept under the conditions of this General Permit;

B. Have access to and copy, at reasonable times, any records that are required to be kept under the 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 time, substances or parameters for the purpose of assuring compliance with the General Permit or other applicable requirements; and

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

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARDS

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

If a source which has been issued ATO(s) becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, reapply for coverage under the General

Permit demonstrating how the source will comply with the standard.

XI. 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]

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

[A.A.C. R18-2-310.01.A.1]

ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XI.A.1.a.i above.

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

b. The report shall contain the following information:

i. Identity of each stack or other emission point where the excess emissions occurred;

[A.A.C. R18-2-310.01.B.1]

ii. Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

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

iii. Date, time and duration, or expected duration, of the excess emissions;

[A.A.C. R18-2-310.01.B.3]

iv. Identity of the equipment from which the excess emissions emanated;

[A.A.C. R18-2-310.01.B.4]

v. Nature and cause of such emissions;

[A.A.C. R18-2-310.01.B.5]

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

[A.A.C. R18-2-310.01.B.6]

vii. Steps taken to limit the excess emissions. If the excess

emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

[A.A.C. R18-2-310.01.B.7 & 8]

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 XI.A.1 above. [A.A.C. R18-2-310.01.C)]

B. Permit Deviations Reporting

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

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

C. Emergency Provision

1. An "emergency" means any situation arising from sudden and reasonably 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.

[A.A.C. R18-2-306.E.1]

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

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

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

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

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

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

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

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

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

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

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.

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

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

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

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

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

D. Compliance Schedule

[ARS § 49-426(I.5)]

For any excess emission or permit deviation that cannot be corrected with 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

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

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

[A.A.C. R18-2-310.A.1]

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

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

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

[A.A.C. R18-2-310.A.3]

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

[A.A.C. R18-2-310.A.4]

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

[A.A.C. R18-2-310.A.5]

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of Condition XI.A and has demonstrated all of the following: [A.A.C. R18-2-310.B]

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;

[A.A.C. R18-2-310.B.1]

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;

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

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;

[A.A.C. R18-2-310.B.3]

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;

[A.A.C. R18-2-310.B.4]

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

[A.A.C. R18-2-310.B.5]

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

[A.A.C. R18-2-310.B.6]

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;

[A.A.C. R18-2-310.B.7]

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;

[A.A.C. R18-2-310.B.8]

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

[A.A.C. R18-2-310.B.9]

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

[A.A.C. R18-2-310.B.10]

3. Affirmative Defense for Startup and Shutdown

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

[A.A.C. R18-2-310.C.1]

i. The excess emissions could not have been prevented through careful and prudent planning and design;

[A.A.C. R18-2-310.C.1.a]

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

[A.A.C. R18-2-310.C.1.b]

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

[A.A.C. R18-2-310.C.1.c]

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

[A.A.C. R18-2-310.C.1.d]

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

[A.A.C. R18-2-310.C.1.e]

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

[A.A.C. R18-2-310.C.1.f]

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

[A.A.C. R18-2-310.C.1.g]

viii. Contemporaneous records documented the Permittee's actions in response to the excess emissions.

[A.A.C. R18-2-310.C.1.h]

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 XI.E.2 above.

A.A.C. R18-2-310.C.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 XI.E.2 above. [A.A.C. R18-2-310.D]

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XI.E.2 or XI.E.3 above, the Permittee shall demonstrate, through submission of the data and information required by Conditions XI.E and XI.A, 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]

XII. RECORD KEEPING REQUIREMENTS

A. Monitoring Records **[A.A.C. R18-2-306.A.4.a]**

The Permittee shall keep records of all required monitoring information including, but not limited to, the following; [A.A.C. R18-2-306.A.4.a]

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

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

2. The date(s) analyses were performed;

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

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

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

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

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

5. The results of such analyses; and

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

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

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

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least 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 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.

XIII. REPORTING REQUIREMENTS

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

The Permittee shall submit the following reports:

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

B. Excess emissions, permit deviations, and emergency reports in accordance with Section XI of Attachment "A".

C. Performance test results in accordance with Condition XV.G of Attachment "A".

D. Other reports required by any condition in Attachment "B".

XIV. 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.G]**

XV. FACILITY CHANGE ALLOWED WITHOUT OBTAINING AN ATO OR INDIVIDUAL PERMIT

[A.A.C. R18-2-317.02]

A. Except for a physical change or change in the method of operation at a Class II source subject to logging or notice requirements in Conditions XV.B and XV.C below, a change at a Class II source shall not be subject to notice or logging requirements under this Section. [A.A.C. R18-2-317.02.A]

B. The following changes may be made if the source keeps on site records of the changes according to Appendix 3 of the Arizona Administrative Code:

1. Implementing an alternative operating scenario, including raw material changes;

2. Changing process equipment (as long as the change does not require a new ATO), operating procedures, or making any other physical change if the permit requires the change to be logged;

3. Engaging in any new insignificant activity listed in A.A.C. R18-2-101.57.a through A.A.C. R18-2-101.57.i but not listed in the permit;

4. Replacing an item of air pollution control equipment listed in the permit with an identical (same model, different serial number) item. The Director may require verification of efficiency of the new equipment by performance tests; and

5. A change that results in a decrease in actual emissions if the source wants to claim credit for the decrease in determining whether the source has a net emissions increase for any purpose. The logged information shall include a description of the change that will produce the decrease in actual emissions. A decrease that has not been logged is creditable only if the decrease is quantifiable, enforceable, and otherwise qualifies as a creditable decrease.

C. The following changes may be made if the source provides written notice to the Department in advance of the change as provided below:

1. If allowed under the General Permit, replacing an item of air pollution control equipment listed in the permit with one that is not identical but that is substantially similar and has the same or better pollutant removal efficiency: 7 days. The Director may require verification of efficiency of the new equipment by performance tests;

2. If allowed under the General Permit, replacing an item of air pollution control equipment listed in the permit with one that is not substantially similar but that has the same or better efficiency: 30 days. The Director may require verification of efficiency of the new equipment by performance tests; and

3. A change that would trigger an applicable requirement that already exists in the permit: 30 days unless otherwise required by the applicable requirement.

D. For each change under Condition XV.C above, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:

1. When the proposed change will occur,

2. A description of the change,

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

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

E. The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate operating scenario under Condition XV.B.1.

F. If a source change is described under both Conditions XV.B and XV.C above, the source shall comply with Condition XV.C above.

G. A copy of all logs required under Condition XV.B shall be filed with the Director within 30 days after each anniversary of the permit issuance date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

H. Logging Requirements

[A.A.C. R18-2-317.02.B and Appendix 3]

1. Each log entry required by a change under Condition XV.B shall include the following information:

   a. A description of the change, including:

      i. A description of any process change;

      ii. A description of any equipment change, which does not require a new or revised ATO(s), including both old and new equipment descriptions, model numbers and serial numbers, or any other unique equipment number; and

      iii. A description of any process material change.

   b. The date and time that the change occurred,

   c. The provision of Condition XV.B that authorizes the change to be made with logging.

   d. The date the entry was made and the first and last name of the person making the entry.

2. Logs shall be kept for 5 years from the date created. Logging shall be performed in indelible ink in a bound log book with sequentially numbered pages, or in any other form, including electronic format, approved by the Director.

XVI. 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 Performance 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 the test result.

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 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.

XVII. PROPERTY RIGHTS

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

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

XVIII. SEVERABILITY CLAUSE

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

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.

XIX. PERMIT SHIELD

[A.A.C. R18-2-325 and -508]

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 XV of this Attachment.

XX. ACCIDENTAL RELEASE PROGRAM

[40 CFR 68]

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

XXI. APPLICABILITY OF NSPS GENERAL PROVISIONS

[40 CFR 60]

For all equipment subject to a New Source Performance Standard, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 60 of the Code of Federal Regulations.

XXII. APPLICABILITY OF NESHAP GENERAL PROVISIONS

[40 CFR 60]

For all equipment subject to National Emissions Standards for Hazardous Air Pollutants, the Permittee shall comply with all applicable requirements contained in Subpart A of Title 40, Chapter 63 of the Code of Federal Regulations.

ATTACHMENT "B": SPECIFIC CONDITIONS

AIR QUALITY CONTROL GENERAL PERMIT FOR CRUSHING AND SCREENING PLANTS

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

This General Permit covers sources which meet the requirements as laid out in the general permit application packet for Crushing and Screening Plants.

[A.A.C.R18-2-302.B, –501 through -511]

III. FACILITYWIDE LIMITATION AND STANDARDS

A. General Requirements

1. *The Permittee shall not operate the equipment identified in the ATO for more than the number of hours on the ATO.*

[A.A.C. R18-2-306.01 and A.A.C. R18-2-331.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 have on-site, or on-call, a certified Method 9 observer.

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

Until the Director makes the myDEQ online portal available to apply for and obtain permits, the Permittee shall only co-locate equipment from other crushing and screening facilities owned by the Permittee and covered by a General Permit, provided that the Permittee re-calculates emissions for the updated equipment configuration. If the results of the updated emission calculations warrant a change in the hours of operation in the ATO, the Permittee shall submit to the Department a request for an ATO revision.[A.A.C. R18-2-306.A.2]

4. Operating limitations in Conditions III.B, III.C, and III.D below do not apply to Native American lands.

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

B. Prohibition and Limited Coverage in Nonattainment Areas

1. *The Permittee shall not operate within the following portion of Pinal County: T4S, R3E – R4E, T5S, R3E – R4E (excluding sections 12, 13, 24, and 25) and identified in Appendix "A"*.

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

2. *Between October 1st and March 31st, the Permittee shall not operate in portions of the Nogales area located in the southern part of Santa Cruz County (The portions of the following Townships which are within the State of Arizona and lie*

east of 111 degrees longitude: T23S, R13E, T23S, R14E, T24S, R13E, T24S, R14E identified in Appendix "B), on any day that the Nogales particle pollution risk forecast at http://www.azdeq.gov/environ/air/ozone/nogales.pdf shows the risk of unhealthy particulate matter concentration to be "High" or if the Air Quality Index (AQI) for $PM_{2.5}$ is forecast as "Unhealthy for Sensitive Groups".

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

C. PM_{10} Attainment Area Throughput Limitations

1. *Unless further restricted by the hourly limitations identified in the ATOs, the Permittee shall not operate the crushing and screening plant such that the throughput exceeds 6,500 tons per day (tpd).*

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

2. *Unless further restricted by the hourly limitations identified in the ATOs, the Permittee shall not operate the co-located concrete batch plant such that the throughput exceeds 1,275 cubic yards per day (yd^3/day).*

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

D. PM_{10} Nonattainment Area Throughput Limitations

1. Standalone Crushing and Screening Plant (No Co-location of Concrete Batch Plant).

Unless further restricted by the hourly limitations identified in the ATOs, the Permittee shall not operate the crushing and screening plant equipment such that the throughput exceeds 4,410 tons per day (tpd).

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

2. Crushing and Screening Plant with Co-located Concrete Batch Plant

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

a. *Unless further restricted by the hourly limitations identified in the ATOs, the Permittee shall not operate the crushing and screening plant equipment such that the throughput exceeds 4,095 tons per day (tpd).*

b. *Unless further restricted by the hourly limitations identified in the ATOs, the Permittee shall not operate the concrete batch plant equipment such that the throughput exceeds 1,275 cubic yards per day (yd^3/day).*

3. For purposes of Condition III.D.1 and III.D.2, nonattainment areas are identified in 40 CFR 81.303. Visual representations of each nonattainment area can be found below:

[A.A.C. R18-2-306.A.2, 40 CFR 81.303]

a. All of Maricopa County.

b. West Pinal PM_{10} Nonattainment Area.

Portions of the West Pinal Planning Area , including portions of Pinal County that is part of the of the Phoenix Planning Area as displayed in Appendix “A”.

c. Nogales PM_{10} Nonattainment Area.

Portions of Santa Cruz County as displayed in Appendix “B”.

d. Miami and Hayden PM_{10} Nonattainment Area.

Portions of Pinal County and Gila County as displayed in Appendix “C”.

e. Ajo and Rillito PM_{10} Nonattainment Area.

Portions of Pima County as displayed in Appendix “D”.

f. Yuma PM_{10} Nonattainment Area.

Portions of Yuma County as displayed in Appendix “E”.

g. Paul Spur/Douglas PM_{10} Nonattainment Area.

Portions of Cochise County as displayed in Appendix “F”.

h. All other areas designated as a PM_{10} nonattainment area following the issuance of this general permit.

E. Visible Emissions Monitoring Procedure

A certified Method 9 observer shall conduct a monthly visual survey of visible emissions from the process sources referencing this condition as per the following procedure:

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

1. If the observer, during the visual survey, does not see visible emissions that on an instantaneous basis appears to exceed the applicable opacity standard, then the observer shall keep a record of the name of the observer, the date on which the observation was made, and the results of the survey.

2. If the observer sees a visible emission from the process source that on an instantaneous basis appears to exceed applicable opacity standard, then the observer shall, if practicable, take a six-minute Method 9 observation of the visible emission. If the six-minute opacity of the visible emission is less than or equal to applicable opacity standard, the observer shall make a record of the date and time of the observation, name of the observer, and the results of the Method 9 observation.

3. If the six-minute opacity of the visible emission exceeds applicable opacity standard, then the Permittee shall adjust or repair the controls or equipment to reduce opacity to below the applicable standard. The Permittee shall keep record of the date and time of the observation, name of the observer, the results of the

Method 9 observation, and records of any corrective action taken. The Permittee shall report this as an excess emission under Condition XI.A of Attachment "A".

F. Recordkeeping Requirements

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

1. The Permittee shall maintain daily, monthly, and rolling 12-month total 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 (in hours and minutes), the stopping time (in hours and minutes). Operating hours for equipment that utilizes an hours 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 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. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring, recordkeeping, and testing activities required by Attachment "B", "C", "D", and "E" performed during the compliance term.

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

5. The Permittee shall keep a logbook of the updated emission calculations required by Condition III.A.4 of this Section, and shall make it available to inspectors upon request.

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

G. Until the Department makes available the "myDEQ" e-portal service to apply and obtain permits, the Permittee shall follow the requirements of A.A.C. R18-2-503. Upon notification from the Director of "myDEQ" availability, the Permittee shall conduct all permitting services and transactions through the e-portal.

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

IV. CRUSHING AND SCREENING OPERATIONS - 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 and Administrator for all new facilities that were not previously permitted a written notification as follows:

[40 CFR 60.7]

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 and Administrator for any affected facility subject to Condition IV of Attachment "B", a written notification as follows: [40 CFR 60.7.a.4]

a. A notification of any physical or operational change to an affected facility subject to Condition IV of Attachment "B", 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).

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.

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

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]

3. Permit Shield

Compliance with Condition IV.B of Attachment "B" shall be deemed compliance with 40 CFR 60.676.i).

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

C. Particulate Matter and Opacity

1. Emission Limitations and Air Pollution Control

a. Crusher Operations without Capture Systems

i. *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]

ii. *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

i. *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]

ii. *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]

iii. 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]

iv. 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]

v. *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]

vi. *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]

vii. Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the stack particulate matter limits of Condition IV.C.1.b.iii and IV.C.1.b.iv but must meet

the applicable opacity limits of Condition IV.C.1.b.v or IV.C.1.b.vi. 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 IV.C.1.a or IV.C.1.b, or the building enclosing the affected facility or facilities shall comply with the following emission limits:

[40 CFR 60.672.e]

i. *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]

ii. *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*.

iii. 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, -306.A.2]
[Material permit conditions are indicated by underline and italics]

2. Monitoring, Reporting, and Recordkeeping

a. The Permittee shall conduct monthly opacity monitoring on all affected facilities to which an opacity standard applies, in accordance with Condition III.E 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 R18-2-331.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:*

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

i. *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]

ii. *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 IV.C.2.j.

[40 CFR 60.674.b]

i. 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 IV.C.3.a.ii provided that the affected facility meets the criteria of Condition IV.C.2.d.i(a) and IV.C.2.d.i(b) below. [40 CFR 60.674.b.1]

(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 IV.C.2.d and Condition IV.C.2.j 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 IV.C.3.

[40 CFR 60.674.b.1.ii]

ii. 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 IV.C.2.j must specify the control mechanism being used instead of the water sprays.

[40 CFR 60.674.b.2]

e. Except as specified in Condition IV.C.2.f below, 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 IV.C.2.j. 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 IV.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. The revised visible emissions success level shall be incorporated into the ATO for the equipment.

[40 CFR 60.674.c]

f. As an alternative to the periodic Method 22 visible emissions inspections specified in Condition IV.C.2.e, above, the Permittee of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, which uses a baghouse to control emissions may use a bag leak detection system. *The Permittee shall install, operate, and maintain the bag leak detection system according to Conditions IV.C.2.f.i through IV.C.2.f.iii below*.

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

i. Each bag leak detection system shall meet the following specifications and requirements:

[40 CFR 60.674.d.1]

(a) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(b) The bag leak detection system sensor must provide output of relative PM loadings. The Permittee shall continuously record the output from the bag leak detection system using electronic or other means (e.g. , using a strip chart recorder or a data logger).

(c) The bag leak detection system shall be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to Condition IV.C.2.f.i(d) below, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(d) In the initial adjustment of the bag leak detection system, the Permittee shall establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(e) Following initial adjustment, the Permittee shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Director except as provided in Condition IV.C.2.f.i(f) below.

(f) Once per quarter, the Permittee may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by Condition IV.C.2.f.ii.

(g) The Permittee shall install the bag leak detection sensor downstream of the fabric filter.

(h) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

ii. The Permittee shall develop and submit to the Director for approval a site-specific monitoring plan for each bag leak detection system. The Permittee shall operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the following item:

[40 CFR 60.674.d.2]

(a) Installation of the bag leak detection system;

(b) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(c) Operation of the bag leak detection system, including quality assurance procedures;

(d) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(e) How the bag leak detection system output will be recorded and stored; and

(f) Corrective action procedures as specified in Condition IV.C.2.f.iii below. In approving the site-specific monitoring plan, the Director may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the Permittee identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

iii. For each bag leak detection system, the Permittee shall initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in Condition IV.C.2.f.ii(f) above, the Permittee shall alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

[40 CFR 60.674.d.3]

(a) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(b) Sealing off defective bags or filter media;

(c) Replacing defective bags or filter media or otherwise repairing the control device;

(d) Sealing off a defective fabric filter compartment;

(e) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(f) Shutting down the process producing the PM emissions.

g. 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]

h. Wet Scrubber

i. 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]

ii. 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.

[40 CFR 60.676.d]

iii. The reports required under Condition IV.C.2.h.ii, above, shall be postmarked within 30 days following end of the second and fourth calendar quarters.

[40 CFR 60.676.e]

i. The Permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Condition IV.C.1, including reports of opacity observations made using Method 9 to demonstrate compliance with Condition IV.C.1.a.i, IV.C.1.a.ii, IV.C.1.b.i, IV.C.1.b.ii, IV.C.1.b.v, IV.C.1.b.vi, IV.C.1.c.i, or IV.C.1.c.ii.

[40 CFR 60.676.f]

j. 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 IV.C.2.d or IV.C.2.e, 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]

k. For each bag leak detection system installed and operated according to Condition IV.C.2.f, the Permittee shall keep the following records;

[40 CFR 60.676.b.2]

i. Records of the bag leak detection system output;

ii. Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings;

iii. The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

3. Testing Requirements

a. Initial Compliance

i. 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 IV.C.1.b.iii, IV.C.1.b.iv, IV.C.1.b.v, IV.C.1.b.vi, IV.C.1.b.vii, IV.C.1.c.i, IV.C.1.c.ii, and IV.C.1.c.iii, by conducting initial performance tests according to 40 CFR 60.8 and the test methods and procedures of Condition IV.C.3. Affected facilities controlled by wet scrubbers are exempt from opacity testing.

[Table 2 to 40 CFR 60 Subpart OOO]

ii. 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 IV.C.1.a.i, IV.C.1.a.ii, IV.C.1.b.i, and IV.C.1.b.ii, by conducting initial performance tests according to 40 CFR 60.11 and the test methods and procedures of Condition IV.C.3. 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 standards in Condition IV.C.1 as follows: [40 CFR 60.675.b]

i. Except as specified in Condition IV.C.3.h.iii, and IV.C.3.h.iv, 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.

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

c. In determining compliance with the particulate matter standards in Condition IV.C.1.a.i, IV.C.1.a.ii, IV.C.1.b.i, IV.C.1.b.ii, or IV.C.1.c.i, the Permittee shall use Method 9 and the procedures in 40 CFR 60.11, with the following additions:

[40 CFR 60.675.c.1]

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

ii. 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.

iii. 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 under Condition IV.C.1.b.vii 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 IV.C.1.a.i, IV.C.1.a.ii, IV.C.1.b.i, IV.C.1.b.ii, or IV.C.1.c.i, 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 IV.C.1.c.i, the Permittee shall complete the testing specified in Condition IV.C.3.g.i and IV.C.3.g.ii. Performance tests shall be conducted while all affected facilities inside the building are operating.

[40 CFR 60.675.d]

i. 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 IV.C.3.b and 40 CFR 60.11.

ii. 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 IV.C.1.c.i. 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 IV.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 IV.C.3:

[40 CFR 60.675.e]

i. For the method and procedure of Condition IV.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:

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

iii. Separate the emissions so that the opacity of emissions from each affected facility can be read.

iv. 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.

v. Method 5I may be used to determine the PM concentration as an alternative to the methods specified in Condition IV.C.3.b.i. 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.

vi. In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 [i.e., velocity head <1.3 mm H2O (0.05 in. H2O)] and referred to in EPA Method 5. For these conditions, the Permittee may determine the average gas flow rate produced by the power fans (e.g., from vendor-supplied fan curves) to the building vent. The Permittee may calculate the average gas velocity at the building vent measurement site using Equation 1 below, and use this average velocity in determining and maintaining isokinetic sampling rates.

$$V_e = \frac{Q_f}{A_e} \quad \text{(Equation 1)}$$

Where:

V_e= average building vent velocity (feet per minute);

Q_f= average fan flow rate (cubic feet per minute); and

A_e= area of building vent and measurement location (square feet).

i. To comply with Condition IV.C.2.h.ii, the Permittee shall record the measurements as required in Condition IV.C.2.h.i using the monitoring devices in Condition IV.C.2.c.i and IV.C.2.c.ii 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]

4. Permit Shield

Compliance with Condition IV.C of Attachment "B" 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), Table 2 and Table 3 in 40 CFR 60 Subpart OOO . [A.A.C.R18-2-325]

V. CRUSHING AND SCREENING OPERATIONS – NON-NSPS

A. Applicability

A Non-NSPS crushing and screening facility is defined as follows:

1. Any combination of the following equipment that was constructed on or before August 31, 1983:

a. Rock crushers;

b. Screens;

c. Conveyors and conveyor transfer points;

d. Stackers;

e. Auxiliary Lime Silos;

f. Reclaimers; and

g. All gravel or crushed stone processing plants.

2. Any portable sand and gravel plants and crushed stone plants with capacities less than or equal to 150 tons per hour.

3. Any standalone screening facility.

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:

i. 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:

[A.A.C. R18-2-722.B.1]

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

where:

E = the maximum allowable emissions rate in pounds-mass per hour.
P = the process weight rate in tons-mass per hour

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

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

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

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

[A.A.C. R18-2-331.A.3.d and 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. Fugitive emissions from operation of gravel or crushed stone processing shall be controlled in accordance with Condition XI.B.1.a.ii of Attachment "B".

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

3. Monitoring and Recordkeeping Requirements

a. The Permittee shall conduct monthly opacity monitoring in accordance with Condition III.E of Attachment "B".

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

b. Periodic Monitoring Requirements

[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]

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.*

c. Recordkeeping Requirements

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

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

4. Permit Shield

Compliance with Condition V.B of Attachment "B" shall be deemed compliance with A.A.C. R18-2-722.B, A.A.C. R18-2-722.C, A.A.C. R18-2-722.D, A.A.C. R18-2-722.E, A.A.C. R18-2-722.F, and A.A.C. R18-2-722. G. [A.A.C. R18-2-325]

VI. INTERNAL COMBUSTION ENGINES

A. Facility Wide Requirements

1. Operational Limitations

a. 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 98.

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

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

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

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

These records shall be made available upon request.

b. Permitted Fuel Requirement

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

The Permittee shall only burn the fuels allowed by the ATO(s) in the I.C. engines.

B. Engines Subject to State Regulations (Non-NSPS)

Applicability:

The provisions of this Section are applicable to all internal combustion (I.C.) engines subject to state regulations. Such equipment are marked as not subject to NSPS on their respective ATO.

[A.A.C. R18-2-306.A.2, and A.A.C. R18-2-306.01]

1. Particulate Matter and Opacity

a. Emission Limitations and Standards

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

i. The Permittee shall not cause or allow to be discharged into the atmosphere from the generator stack(s) particulate matter in excess of the amount calculated by the following equation:

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

E = the maximum allowable particulate emissions rate in pounds-mass per hour
Q = the heat input in million Btu per hour

ii. For the purposes of the calculations required in Condition VI.B.1.a.i 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.

iii. Opacity

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

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

(b). Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

b. Monitoring and Recordkeeping

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

i. Permittee shall conduct monthly opacity monitoring on each generator in accordance with Condition III.E of Attachment "B".

ii. 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.

c. Permit Shield

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

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

2. Sulfur Dioxide

a. Emission Limitations and Standards

i. 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]

ii. The Permittee shall only burn ultra low sulfur fuel (sulfur content below 15 ppm by weight) in the generator(s).

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

b. Monitoring, Recordkeeping, and Reporting

i. The Permittee shall keep daily records of the sulfur content and lower heating value of the fuel being fired in the generator(s). The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in Condition VI.B.2.a.ii. The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

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

ii. The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 15 ppm by weight.

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

3. Permit Shield

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

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

C. Compression Ignition Engines Subject to NSPS

1. Applicability

This Section is applicable to generator(s) identified as subject to New Source Performance Standards (NSPS) 40 CFR 60 Subpart IIII on their respective Authorization to Operate (ATO).

2. General Requirements

a. Timelines for Installing or Importing Previous Model Year CI ICE

The Permittee shall follow the requirements set forth in 40 CFR 60.4208 to meet the timelines.

[40 CFR 60.4208]

b. Operating Requirements

i. The Permittee shall operate and maintain the CI ICE and the control device according to the manufacturer's emission-related written instructions, over the entire life of the engine.

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

ii. The Permittee shall only change those emission-related engine settings that are permitted by the manufacturer.

[40 CFR 60.4211.a]

iii. The Permittee shall meet the applicable requirements of 40 CFR Part 89, 94 and 1068.

[40 CFR 60.4211.a]

c. Fuel Requirements

The Permittee operating a stationary CI ICE shall use diesel fuel that meet the requirements of non road diesel fuel listed in 40 CFR 80.510.b.

[40 CFR 60.4207.b]

d. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4206, 60.4207.b, 60.4208, and 60.4211.a

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

3. Emission Limitations and Standards

[40 CFR 60.4204.a, 40 CFR 60.4204.b, 60.4201.a, and 60.4201.d]

a. The Permittee operating an non-emergency CI ICE shall comply with the emission standards listed in the corresponding applicable regulations for the same model year, engine rating and cylinder displacement as stated in Table 1 below:

Table 1: Emission Standards for Non-Emergency CI ICE

Model Year	Maximum Engine Rating	Displacement (Liters per cylinder)	Applicable regulations
Pre-2007	≤ 2237 kilowatt (3000 horsepower)	Less than 10	Table 1 of 40 CFR Part 60 Subpart IIII
		≥ 10 and < 30	Tier 1 standards of 40 CFR 94.8(a.1)
2007 and Later	≤ 2237 kilowatt (3000 horsepower)	Less than 10	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
		≥ 10 and < 30	40 CFR 94.8

b. The Permittee operating a non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use shall meet the not-to-exceed (NTE) standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4204.d]

c. The Permittee operating any modified or reconstructed non-emergency stationary CI ICE subject to this Section shall meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in Table 1 above.

[40 CFR 60.4204.e)]

d. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4204.a, 60.4204.b, 60.4204.d, 60.4204.e, 60.4201.a, and 60.4201.d.

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

4. Compliance Requirements

a. Pre-2007 Model Year Stationary CI ICE

[40 CFR 60.4211.b]

b. The Permittee operating a pre-2007 model year and complying with the emission standards specified in Table 1 above, shall demonstrate compliance according to one of the methods specified in conditions VI.C.4.b.i through VI.C.4.b.iv of this section:

i. Purchasing an engine certified according to 40 CFR Part 89 or Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

ii. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR Subpart IIII and these methods must have been followed correctly.

iii. Keeping records of engine manufacturer data indicating compliance with the standards.

iv. Keeping records of control device vendor data indicating compliance with the standards.

c. 2007 and later Year Stationary CI ICE

[40 CFR 60.4211.c]

The Permittee operating a 2007 model year and later stationary CI ICE subject to the emission standards in Table 1 above, shall comply by purchasing an engine certified to the emission standards in Table 1 above, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

d. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4211.b, and 60.4211.c.

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

5. Recordkeeping Requirements

a. Non-certified ICE > 10 liters/cylinder or pre-2007 ICE > 130 KW (175 hp)

[40 CFR 60.4214.a.2.ii & 40 CFR 60.4214.a.2.iv)]

The Permittee operating a non-emergency ICE that has a displacement greater than or equal to 10 liters per cylinder, or is a pre-2007 model year engine that is greater than 130 KW (175 horsepower) and not certified shall keep records of the following information:

i. Maintenance conducted on the engine; and

ii. Documentation from the manufacturer that the engine meets the emission standards.

b. Certified ICE

The Permittee operating a certified CI ICE shall keep documentation from the manufacturer that the engine is certified to meet the emission standards.

[40 CFR 60.4214.a.2.iii]

c. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4214.a.2.ii, 60.4214.a.2.iii, and 60.4214.a.2.iv.

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

D. NSPS Requirements for Stationary Spark Ignition Engines

1. Applicability

This Section is applicable to generators identified as applicable to New Source Performance Standards (NSPS) 40 CFR 60 Subpart JJJJ on the respective ATO.

2. Requirements

The Permittee shall follow all the applicable requirements set forth in 40 CFR 60 Subpart JJJJ.

E. NESHAP Requirements for Generators

1. Applicability

a. This Section is applicable to generators identified as applicable to National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart ZZZZ standards on the respective ATO. For engines that are also marked as subject to 40 CFR 60 Subpart IIII or JJJJ on the associated ATO, compliance with Section VI.C and VI.D of this Attachment is considered compliance with this Section and there are no further requirements under this Section.

b. New or Reconstructed Stationary RICE

[40 CFR 63.6590 .a.2; 63.6590.a.3]

A stationary RICE is new if the construction or reconstruction of the RICE commenced on or after June 12, 2006. A stationary RICE is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2.

2. Compliance Dates

[40 CFR 63.6595.a]

The Permittee shall comply with the applicable emission and operating requirements for this Section by May 3, 2013 for existing compression ignition engines, and by October 19, 2013 for existing spark ignition engines.

3. General Requirements

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

a. The Permittee shall comply with this Section by following the requirements listed in the document titled "RICE NESHAP Summary of Requirements" which is attached to each applicable ATO.

4. Permit Shield

a. Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 63.6590.a.2, 63.6590.a.3, and 6595.a.

VII. CONCRETE BATCH PLANTS

A. Applicability of the Collocated Concrete Batch Plant

1. For the purposes of this permit, the collocated concrete batch plant refers to the co location of portable or stationary concrete batch plant equipment with the crushing and screening plant covered by this air quality control permit.

2. Concrete batch plant equipment is considered collocated when all of the following apply:

a. The equipment is located on property that is contiguous or adjacent to the crushing and screening facility;

b. The equipment is under same or common control; and

c. Belongs to the same industrial grouping.

B. Particulate Matter and Opacity

1. Emission Limits/Standards

a. 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]

b. Fugitive dust emissions from the concrete batch plant shall be controlled in accordance with Section XI.B.1.a.ii of Attachment "B"

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

2. Air Pollution Controls

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

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

i. Cement/Fly Ash Silos

(a) *Baghouses, or equivalent, shall be operated* in accordance with vendor specifications *to control emissions vented by cement/fly ash storage silos during the loading of cement or fly ash*. If vendor specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of each baghouse. A copy of the vendor specifications or the operation and maintenance plan shall be kept on site and made available to ADEQ or the respective AQCD upon request.

(b) Loading of cement / fly ash 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.

ii. Product Delivery System

(a) For truck-mix facilities, *a rubber sleeve, baghouse, or equivalent, shall be installed and maintained on the product delivery system* to minimize visible emissions during material transfer to trucks.

(b) A rubber sleeve, baghouse, or equivalent, shall be operated and maintained 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.

iii. Wet Suppression Systems

Wet suppression systems shall be operated and maintained in accordance with vendor specifications *to control associated emission activities*. If vendor specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of the wet suppression systems. 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.

3. Monitoring, Recordkeeping, and Reporting

Permittee shall conduct monthly opacity monitoring in accordance with Condition III.E of Attachment “B”.

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

4. Permit Shield

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

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

VIII. WASH PLANT REQUIREMENTS

The Permittee operating a wash plant shall ensure that process materials are completely saturated with water.

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

IX. BOILERS

A. Applicability

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

B. Fuel Limitation

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

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

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

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

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 following levels (in parts per million by weight):

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

2. 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 IX.B.1.c above are not exceeded.

C. Particulate Matter

1. Emission Limitations

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

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

$E = 1.02Q^{0.769}$

Where:
E = the maximum allowable particulate emissions rate in pounds-mass per hour
Q = the heat input in million Btu per hour.

2. Monitoring, Reporting, and Recordkeeping

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

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

3. Permit Shield

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

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

D. Opacity

1. Emission Limitations and Standards

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

2. Monitoring, Recordkeeping and Reporting Requirements

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

[A.A.C. R18-2–724.J]

b. The Permittee shall conduct monthly opacity monitoring of visible emissions emanating from the stack of the boiler, in accordance with Condition III.E of Attachment “B”.

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

3. Permit Shield

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

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

E. Sulfur Dioxide

1. Emission Limitations

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

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

b. If low-sulfur fuel oil is fired (less than 15 ppm by weight), the Permittee shall not cause, allow, or permit emissions of more than 1.0 pounds of sulfur dioxide per million Btu heat input.

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

2. Monitoring, Reporting and Record Keeping

The Permittee shall keep records of fuel supplier certifications to demonstrate that the fuel oil is low-sulfur (less than 0.9 percent by weight). The certification shall document the sulfur content and the method used to determine the sulfur content of fuel. Upon request, the records shall be made available to the ADEQ inspector.

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

3. Permit Shield

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

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

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.

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

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

[40 CFR 63.11194]

2. Compliance Dates

a. The Permittee operating an existing boiler shall comply with this Part no later than March 21, 2012.

[40 CFR 63.11196.a.1]

b. The Permittee operating a new boiler shall comply with this Part upon startup.

[40 CFR 63.11196.c]

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 Administrator or Director that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.11205.a]

b. Work-Practice Standard

i. Existing Boiler

(a) Initial Boiler Tune-up

The Permittee operating an existing boiler shall conduct a boiler tune-up of the boiler according to the procedures stated in Condition IX.F.3.c no later than March 21, 2012 and according to the applicable provisions in 63.7(a.2).

[40 CFR 63.11210.b]

(b) Subsequent Boiler Tune-ups

Subsequent 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]

ii. New Boiler

(a) Initial Boiler Tune-up

[40 CFR 63.11210.d]

The Permittee operating a new boiler shall conduct an initial boiler tune-up according to the procedures stated in Condition IX.F.3.c within 180 calendar days after startup of the affected facility.

(b) Subsequent Boiler Tune-ups

[40 CFR 63.11223.a]

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

c. Tune-up Procedures

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

i. 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).

ii. 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.

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

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

v. 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).

vi. Maintain onsite and submit, if requested by the Administrator or Director, biennial 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 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 biennial tune-up of the boiler.

vii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

[40 CFR 63.11223.b]

4. Notification, Reporting and Recordkeeping Requirements

a. The Permittee shall keep the following records to document continuous compliance conformance with the tune up requirements:

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

ii. Records shall document the fuel type(s) used monthly by each

boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

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

i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler.

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

iii. The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.

[40 CFR 63.11225]

5. Permit Shield

Compliance with this Part shall be deemed compliance with 40 CFR 63.11225, 40 CFR 63.11223, 40 CFR 63.11196.c, 40 CFR 63.11196.a.1, 40 CFR 63.11205.a, 40 CFR 63.11196, and 40 CFR 63.11194.

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

X. 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(s).

[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]

D. Opacity

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

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

E. Permit Shield

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

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

XI. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Particulate Matter and Opacity

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

a. Emission Limitations/Standards

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

b. Air pollution and Control Requirements

i. Haul Roads and Storage Piles

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

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

ii. 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.3.d and -331.A.3.d]
[Material Permit Condition is indicated by underline and italics]

c. Monitoring and Recordkeeping Requirements

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

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

ii. Opacity Monitoring Requirements

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

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

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

(i) Location, date, and time of the observation; and

(ii) The results of the Method 9 observation.

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

(i) Adjust or repair the controls or equipment to reduce opacity to below the applicable standard; and

(ii) Report it as an excess emission under Condition XI.A of Attachment "A".

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

iii. Explosive Blasting

(a) The Permittee shall keep records of the following information:

(b) The date and time each blast occurred;

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

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

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

d. Permit Shield

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

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

XII. PORTABLE SOURCES

A. Until the Department makes available the myDEQ online portal to apply for and obtain permits, the Permittee shall follow the requirements of A.A.C. R18-2-503. After the portal is available to apply for and obtain permits, the Permittee shall conduct all permitting services and transactions through the portal, including move notices.

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

B. Move Notice [A.A.C. R18-2-513.G and -306.A.5]

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

1. A description of the permitted equipment to be transferred including 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 location to which the equipment is to be transferred, including the availability of all utilities, such as water and electricity, necessary for proper operation for all control equipment;

4. The date on which equipment is to be moved; and

5. The date on which operation of the equipment will begin at the new location.

6. A complete list of all equipment that will 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 source has coverage.

C. Portable Sources Operating Solely in One County

[A.A.C. R18-2-324.A and B]

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

XIII. MOBILE SOURCE EMISSIONS

A. Applicability

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

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

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. Off-Road Machinery

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

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

b. Roadway and Site Cleaning Machinery

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

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

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

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

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

2. Recordkeeping Requirement

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

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

3. Permit Shield

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

Compliance with conditions of this Part shall be deemed compliance with A.A.C. R18-2-801,-802, and -804.

XIV. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

1. Emission Limitations/Standards

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

i. wet blasting;

ii. effective enclosures with necessary dust collecting equipment; or

iii. any other method approved by the Director.

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

b. Opacity

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

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

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

a. The date the project was conducted;

b. The duration of the project; and

c. Type of control measures employed.

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

3. Permit Shield

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

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

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

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

i. The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

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

ii. The Permittee shall not either:

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

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

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

iii. For the purposes of Condition XIV.B.1.b.ii above, 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 XIV.B.1.b.iii(a) through XIV.B.1.b.iii(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

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

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

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

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

iv. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions XIV.B.1.b.iii(a) through XIV.B.1.b.iii(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

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

c. Monitoring and Recordkeeping Requirements

i. Each time a spray painting project is conducted, the Permittee shall log in ink, or in an electronic format, a record of the following:

(a) The date the project was conducted;

(b) The duration of the project;

(c) Type of control measures employed;

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

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

ii. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition XIV.B.1.c.i above.

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

d. 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]

b. Permit Shield

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

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

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

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

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

2. Monitoring and Recordkeeping Requirement

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

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

3. Permit Shield

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

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

AIR QUALITY CONTROL GENERAL PERMIT

FOR CRUSHING AND SCREENING PLANTS

ATTACHMENT "C": ADDITIONAL CONDITIONS INSIDE MARICOPA COUNTY

I. FACILITY WIDE LIMITATIONS

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

Emission Limitations and Standards

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

[300 §301]

C. Gaseous and Odorous Emissions

[320 §300]

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

D. Air Pollution Control Requirements

1. Material Containment Required

[320 §302]

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.

2. Stack Requirements

[320 §303]

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.

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

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

a. The Permittee shall provide and maintain, readily available on-site at all times, (an) O&M plan(s) for any ECS, any other emission processing equipment, and any ECS monitoring devices that are used pursuant to these conditions.

[316 §305.1.a]

b. The Permittee shall submit to the Director for approval the O&M Plan(s) for each ECS and ECS monitoring device that is used pursuant to these conditions.

[316 §305.1.b]

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

[316 §305.1.c]

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

[Rules 316 §305.3 and -331.A.3.c]
[Material Permit Condition is indicated by underline and italics]

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

[316 §305.4]

4. O&M Plan Requirements for Dust Control Measures

a. The Permittee shall provide and maintain, readily available on-site at all times, an O&M plan for equipment associated with any process fugitive emissions and fugitive dust control measures (i.e. gravel pads, wheel washers, truck washers, rumble grates, watering systems, and street sweepers) that are implemented pursuant to these conditions.

[316 §305.2.a]

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

[316 §305.2.b]

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

[316 §305.3]

5. Monitoring, Recordkeeping and Reporting Requirements

a. Opacity Monitoring

b. Opacity shall be determined by observations of visible emissions in Accordance with EPA reference Method 9 as modified by EPA Reference Method 203B.

[300 §501]

c. Operational Recordkeeping

[316 §501.2.a]

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

i. Hours of operation;

ii. Type of batch plant (wet, dry, central)

iii. Throughput per day of basic raw materials including sand, aggregate, cement (tons/day)

iv. Volume of concrete produced per day (cubic yards per day);

v. Volume of aggregate mined per day (cubic yards/day); and

vi. Amount of each basic raw materials including sand, aggregate, cement, flyash, delivered per day (tons/day)

vii. For facilities that assert to be below the thresholds in Maricopa County Rule 316 Section 307.6(a) and Section 307.6(e.1), (minimum of 60 aggregate trucks, mixer trucks, and/or batch trucks exiting a facility on any day), number of aggregate trucks, mixer trucks, and/or batch trucks exiting the facility.

d. Control and Monitoring Device Data

[316 §501.2.c]

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

i. For a fabric filter baghouse

(a) Date of inspection

(b) Date and designation of bag replacement;

(c) Date of service or maintenance related activities; and

(d) Time, date, and cause of fabric filter baghouse failure and/or down time, if applicable.

ii. For a scrubber:

(a) Date of service or maintenance related activities;

(b) Liquid flow rate;

(c) Other operating parameters that need to be monitored to assure that the scrubber is functioning properly and operating within design parameters; and

(d) Time, date, and cause of scrubber failure and/or down time, if applicable.

iii. For watering systems (e.g. spray bars or an equivalent control);

(a) Date, time, and location of each moisture sampling point; and

(b) Results of moisture testing.

e. Operating and Maintenance Plan Records

[316 § 501.3]

i. For any ECS, and other emission processing equipment, and any ECS monitoring devices that are used pursuant to these conditions;

(a) Period of time that an approved emission control system is operating to comply with the conditions in this permit;

(b) Period of time that an approved emission control system is not operating;

(c) Flow rates;

(d) Pressure drop;

(e) Other conditions necessary to determine if the approved emission control system is functioning properly;

(f) Results of visual inspections; and

(g) Correction action taken, if necessary.

ii. For any equipment associated with any process fugitive emissions and any fugitive dust control measures that are implemented to comply with this permit;

(a) A written record of self-inspection on each day that a facility is actively operating. Self-inspection records shall include daily inspections or in compliance with O&M Plan requirements, whichever is more frequent;

(b) Maintenance of street sweepers; and;

(c) Maintenance of trackout control devices, gravel pads, wheel washers, and truck washers.

f. The Permittee shall keep all operational information required by Conditions I.D.5.c, I.D.5.d, and I.D.5.e, in a complete and consistent manner on site and shall be made available without delay to the Director upon request.

[316 § 501.1]

6. Testing Requirements

The following test methods shall be used as appropriate:

a. Grain Loading: Particulate matter and associated moisture content shall be determined using the applicable EPA Reference Methods 1 through 5, 40 CFR Part 60, Appendix A.

[316 § 502.1]

b. Opacity Determination: Opacity observations to measure visible emissions from activities regulated by Section II, and III of this Attachment, (excluding truck dumping directly into any screening operation, feed hopper, or crusher; Raw Material Storage and Distribution, Concrete Plants, Bagging Operations, Internal Combustion Engines, and Other Periodic Activities) 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, adopted as of July 1, 2007. Emissions shall not exceed the applicable opacity standard for a period aggregating more than three minutes in any 60-minute period.

[316 § 502.2]

c. Soil Moisture Testing for Watering Systems

[316 § 502.3]

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

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

iii. Moisture testing shall be conducted on all crushers, shaker screens, and material transfer points (excluding wet plants). Unless prior approval from the Director is granted, moisture testing shall be conducted at the following sample points:

(a) Within 10 feet from the point where crushed aggregate material is placed on the discharge belt conveyor from the crusher;

(b) Within 10 feet from the point where screened aggregate material is placed on the conveyor; and

(c) From each stacker point.

iv. The number of sampling points identified above may be reduced if the Permittee complies with all the follow requirements:

(a) A 5% minimum moisture content, as demonstrated by a soil moisture test conducted in accordance with the test methods described in this section, is maintained at the primary crusher;

(b) A minimum of 20 soil moisture samples are taken at all of the points identified in Condition I.D.6.c.iii, above;

(c) A 4% minimum moisture content, as demonstrated by a soil moisture test conducted in accordance with the test methods described in this section and as demonstrated by the minimum 20 soil moisture samples identified above, is maintained at all the points in Condition I.D.6.c.iii, above.

(d) A written request is submitted to and approved by the Director to revise/modify the Dust Control Plan to reflect the change in moisture content and the reduced number of sampling points according to the demonstration made by the Permittee in accordance with Condition I.D.6.c.iv of this Attachment.

v. Moisture testing is not required on a crusher and/or screen plant equipped with a baghouse or fabric filter, electrostatic precipitator, or wet scrubber, excluding wet spray bars, for control of particulate matter.

vi. Moisture testing shall include all aggregate material less than 0.25 inches in diameter.

vii. Moisture testing shall be conducted in accordance with the requirements of American Society for Testing and Materials C566-97 (2004) "Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying" with the exception that the smaller sample portions may be used.

7. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with the following Maricopa County Rules: 300 § 301, 300 § 501, 320 § 300, 320 § 302, 320 § 303, 316 § 305.1.a, 316 § 305.1.b, 316 § 305.1.c, 316 § 305.2, 316 § 305.3, 316 § 305.4, 300 § 502, 330 § 503.1, 330 § 503.2, 330 § 503.4, 316 § 501.1, 316 § 501.2, 316 § 501.3, 316 § 502.1, 316 § 502.2, and 316 § 502.3.

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

II. CRUSHING AND SCREENING OPERATION

[316]

Particulate Matter

A. Emission Standards

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

1. Stack emissions exceeding 7% opacity and containing more than 0.02 grains per dry standard cubic foot of particulate matter.

   [316 § 301.1.a]

2. Fugitive dust emissions from any transfer point on a conveyer system exceeding 7% opacity.

   [316 § 301.1.b]

3. Fugitive dust emissions exceeding 15% opacity from any crusher.

   [316 § 301.1.c]

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

   [316 § 301.1.d]

5. Fugitive dust emissions exceeding 20% opacity from truck dumping directly into any screening operation, feed hopper or crusher. Opacity observations to determine compliance with this condition shall be conducted in accordance with the techniques specified in Appendix C – Fugitive Dust Test Methods of the Maricopa County Rules.

   [316 § 301.1.e]

B. Air Pollution Control Requirements

The Permittee shall implement process controls described in Condition II.B.1, II.B.2, and II.B.3 or shall implement process controls described in Condition II.B.1 and II.B.4:

[316 § 301.2]

1. Enclosed sides of all shaker screens

   [316 § 301.2.a]

2. Permanently mount watering systems (e.g. spray bars or an equivalent control) on the points listed below for crushers, shaker screens, and material transfer points:

   a. Inlet and outlet of all crushers

   b. Outlet of all shaker screens; and

   c. Outlet of all material transfer points, excluding wet plants.

   [316 § 301.2.b]

3. Operate watering systems (e.g. spray bars or an equivalent control) on the points listed above for crushers, shaker screens, and material transfer points, excluding wet plants, to continuously maintain a 4% minimum moisture content.

   [316 § 301.2.c]

a. The watering system shall be maintained in good operating condition, as verified by daily inspections.

b. The Permittee shall investigate and correct any problems before continuing and/or resuming operations.

c. The Permittee shall conduct soil moisture tests as follows:

i. If the Permittee is required to have in place a Fugitive Dust Control Technician, then the soil moisture tests shall be conducted twice daily in accordance with the test methods as described in Condition I.D.6 of this Attachment.

ii. If the Permittee is not required to have in place a Fugitive Dust Control Technician, then the soil moisture tests shall be conducted once daily in accordance with the test methods as described in Condition I.D.6 of this Attachment.

iii. If the Permittee demonstrates that the 4% minimum moisture content is maintained for a minimum of four weeks, then soil moisture tests may be conducted weekly in accordance with the test methods as described in Condition I.D.6 of this Attachment.

iv. If the Permittee fails to comply with the opacity limitations of Conditions II.A, V.A.1, or V.A.2 and/or if two consecutive soil moisture tests are below 4%, the Permittee shall conduct soil moisture tests as described in Conditions II.B.3.c.ii and II.B.3.c.iii above.

v. If the Permittee complies with both of the following requirements, then the number of sampling points identified in Condition I.D.6 of this Attachment may be reduced:

(a) A soil moisture test is conducted in accordance with Condition I.D.6 of this Attachment at the primary crusher, which indicates that at least a 5% minimum moisture content is maintained; and

(b) A demonstration that complies with the modified dust control provision of Condition II.D.6 of this Attachment is submitted to and approved by the Director and is complied with in accordance with Condition II.D.6 of this Attachment.

4. Enclose and exhaust the regulated process to a properly sized fabric filter baghouse.

[316 § 301.2.d]

C. Monitoring, Record Keeping, and Reporting Requirements

The Permittee shall meet all of the monitoring and recordkeeping requirements specified in Condition III.E of Attachment “B” in order to comply with Conditions II.A.1, II.A.2, II.A.3, II.A.4, and II.A.5 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 the following Maricopa County Rules: 316 § 301.1.a, 316 § 301.1.b, 316 § 301.1.c, 316 § 301.1.d, 316 § 301.1.e and 316 § 301.2.

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

III. RAW MATERIAL STORAGE AND DISTRIBUTION, CONCRETE PLANTS, AND/OR BAGGING OPERATIONS - PROCESS EMISSION LIMITATIONS AND CONTROLS

Particulate Matter and Opacity

A. Emission Limitations/Standards

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

1. Stack emissions exceeding 5% opacity

[316 § 303.1.a]

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

[316 § 303.1.b]

B. Air Pollution Control Requirements

1. The Permittee shall implement the following process controls:

a. On all cement, lime, and/or flyash storage silo(s), the Permittee shall install an operational overflow warning system/device. The system/device shall be designed to alert operator(s) to stop the loading operation when the cement, lime, and/or flyash storage silo(s) are reaching a capacity that could adversely impact pollution abatement equipment.

[316 § 303.2.a]

b. On new cement, lime, and/or flyash silo(s) the Permittee shall install a properly sized fabric filter baghouse or equivalent device designed to meet a maximum outlet grain loading of 0.01 gr/dscf.

[316 § 303.2.b]

c. On dry mix concrete plant loading stations/truck mixed product, the Permittee shall implement one of the following process controls:

[316 § 303.2.c]

i. The Permittee shall install a rubber fill tube;

ii. The Permittee shall install a water spray;

iii. The Permittee shall install a properly sized fabric filter baghouse or delivery system;

iv. The Permittee shall have enclosed mixer stations such that no visible emissions occur; or

v. Conduct mixer loading stations in an enclosed process building such that no visible emissions from the building occur during the mixing activities.

d. On cement silo filling processing/loading operations controls, the Permittee shall install a pressure control system designed to shut-off cement silo filling processes/loading operations, if pressure from delivery truck is excessive, as defined in the O&M Plan.

[316 § 303.2.d]

C. Monitoring, Record Keeping, and Reporting Requirements

The Permittee shall meet all of the monitoring and recordkeeping requirements specified in Condition VII.B.3 of Attachment "B" in order to comply with Condition III.A of Attachment "C".

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

D. Permit Shield

Compliance with this Section shall be deemed compliance with Maricopa County Rule 316 § 303.1 and Maricopa County Rule 316 § 303.2.

[230 § 309]

IV. INTERNAL COMBUSTION ENGINES

A. Applicability

1. The provisions of this section are applicable to all internal combustion engines that are operated for the purpose of producing electrical power, except mobile equipment and non-road engines.

2. An existing engine shall mean an engine that commenced operation prior to October 22, 2003, or an engine on which the construction or modification has commenced prior to October 22, 2003, including the contractual obligation to undertake and complete an order for an engine.

[324 § 208]

3. A new engine shall mean any engine that is not an existing engine.

[324 § 215]

4. Partial Exemptions for Emergency Engines

Any stationary IC engine operated as an emergency engine for any of the following reasons is exempt from all of the conditions of this Section, except for Conditions IV.B.4.a, IV.B.4.c, IV.C.1, and IV.D.1.a, if the engines are:

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;

[324 § 104.1]

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 the public health and safety.

[324 § 104.2]

5. Permit Shield

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

Compliance with the terms of Condition IV.A shall be deemed compliance with Maricopa County Rule 324 § 208, 324 § 215, 324 § 104.1 and 324 § 104.2

B. General

1. Good Combustion Practices/Tuning Procedure

[324 § 302]

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

a. Lubricating Oil and Filter: Change once every three months or after no more than 300 hours of operation, whichever occurs last.

[324 § 302.1]

b. Inlet Air Filter: Clean once every three months or after no more than 300 hours of operation and replace every 1,000 hours of operation or every year, whichever occurs last.

[324 § 302.2]

c. Fuel Filter: Clean once every year or replace (if cartridge type) once every 1,000 hours of operation, whichever occurs last.

[324 § 302.3]

d. Check and adjust the following once every year or after no more than 1,000 hours of operation, whichever occurs last:

[324 § 302.4]

i. Intake and exhaust valves

ii. Spark plugs (if so equipped)

iii. Spark timing and dwell or fuel injection timing (if adjustable), and

iv. Carburetor mixture (if adjustable)

e. Spark Plugs and Ignition Points: Replace after 3,000 hours of operation or every year whichever occurs last.

[324 § 302.5]

f. Coolant: Change after 3,000 hours of operation or every year whichever

occurs last; and

[324 § 302.6]

g. Exhaust System: Check for leaks and/or restrictions after 3,000 hours of operation or every year whichever occurs last.

[324 § 302.7]

2. Efficiency Allowance

Each emission limitation expressed in Conditions IV.D.1, IV.E.1.a, IV.E.1.b, IV.E.1.c, IV.E.1.d, IV.F.1.a, IV.F.1.b, and IV.G.1, may be multiplied by X, where X equals the engine efficiency (E) divided by a reference efficiency of 30 percent. Engine efficiency shall be determined by one of the following methods whichever is higher:

E = (Engine Output) x (100) ÷ (Energy Input)

Where energy input is determined by a fuel measuring device accurate to ± 5% and is based upon the higher heating value (HHV) of the fuel. Percent efficiency (E) shall be averaged over 14 consecutive minutes and measured at peak load for the applicable engine.

E = (Manufacturers Rated Efficiency [Continuous] at LHV) ÷ (HHV)

Where LHV = the lower heating value of the fuel

Engine efficiency shall not be less than 30 percent; an engine with an efficiency lower than 30 percent shall be assigned an efficiency of 30 percent for the purposes of this Condition.

[324 § 305]

3. Equivalent or Identical Engine Replacement

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

[324 § 306]

4. Monitoring, Reporting and Recordkeeping

[324 § 502]

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

[324 § 502.1]

b. The Permittee shall maintain an annual record of good combustion procedures.

[324 § 502.3]

c. The Permittee shall keep annual engine records for emergency engines that include:

i. Hours of operation; and

ii. Explanation for the use of the engine if it is used as an emergency engine.

[324 § 502.4]

5. Permit Shield

Compliance with Condition IV.B shall be deemed compliance with Maricopa County Rule 324 § 302, 324 § 305, 324 § 306 and 324 § 502.

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

C. Fuel Limitations

1. Permitted Fuel

[324 § 301]

The Permittee shall use fuel that contains no more than 0.05% sulfur by weight.

2. Monitoring, Reporting and Recordkeeping Requirements

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

[324 § 501.4]

b. The Permittee shall maintain a monthly record which shall include the hours of operation, the type of fuel used and documentation verifying compliance with the fuel sulfur content.

[324 § 502.4]

3. Permit Shield

Compliance with the terms of Condition IV.C shall be deemed compliance with Maricopa County Rule 324 § 301, 324 § 501.4 and 324 § 502.4.

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

D. Particulate Matter and Opacity

1. Emission Limitations/Standards

[324 § 303]

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

b. The Permittee shall limit PM emissions to 0.40 g/bhp-hr for any new

compression ignition engine that has a rate brake horsepower greater than 250 bhp.

[324 § 304 Table 3]

2. Monitoring, Reporting, and Record keeping

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

a. The Permittee shall meet all of the monitoring and recordkeeping requirements specified in Conditions VI.B.1.b or VI.C of Attachment "B" in order to comply with Conditions IV.D.1.a of Attachment "C".

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

b. The Permittee shall maintain copies of the manufacturer's specifications to show compliance with Condition IV.D.1.b of Attachment "C".

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

3. Permit Shield

Compliance with Condition IV.D shall be deemed compliance with Maricopa County Rule 324 § 303 and 304.

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

E. Nitrogen Oxides

1. Emission Limitations/Standards

a. The Permittee shall comply with one of the following requirements to control NO_x emissions if the rated brake horsepower (bhp) of the existing compression ignition engine is equal to or greater than 400 bhp:

[324 § 304 Table 1]

i. The Permittee shall limit emissions to 550 ppmdv or 7.2 g/bhp-hr;

ii. Employ a turbocharger with aftercooler/intercooler; or

iii. Employ a 4-degree injection timing retard.

b. The Permittee shall comply with one of the following requirements to control NO_x emissions if the rated brake horsepower (bhp) of the existing compression-ignition engine is less than 400 bhp and greater than or equal to 250 bhp:

[324 § 304 Table 1]

i. The Permittee shall limit emissions to 770 ppmdv or 10 g/bhp-hr;

ii. Employ a turbocharger with aftercooler/intercooler; or

iii. Employ a 4-degree injection timing retard.

c. The Permittee shall comply with one of the following requirements to control NO_x emissions if the rated brake horsepower (bhp) of the existing spark ignition is greater than 250 bhp:

[324 § 304 Table 2]

i. The Permittee shall limit emissions to 280 ppmdv or 4.0 g/bhp-hr; or

ii. Employ a three way catalyst. The three way catalyst shall provide a minimum of 80% control efficiency for NO_x for those engines fueled with natural gas, propane, or gasoline.

d. The Permittee shall comply with one of the following requirements to control NO_x emissions if the rated brake horsepower (bhp) of the new spark or compression ignition is greater than 250 bhp:

[324 § 304 Table 3]

i. The Permittee shall limit emissions to 110 ppmdv or 1.5 g/bhp-hr if the engine is a new lean burn spark engine;

ii. The Permittee shall limit emissions to 20 ppmdv or 0.30 g/bhp-hr if the engine is a new rich burn spark engine; and

iii. The Permittee shall limit emissions to 530 ppmdv or 6.9 g/bhp-hr if the engine is a new compression ignition engine.

2. Monitoring, Recordkeeping, and Testing

a. For new I.C. engines, compliance with the limitations listed in Condition IV.E.1 shall be demonstrated by either:

[324 § 501.3]

i. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture, or

ii. Performance of emission testing using the test methods listed in Section 503 of Maricopa County Rule 324.

b. For existing engines, compliance with the emission limitations shall be demonstrated by maintaining records under Condition IV.B.4. Emission testing shall be performed if requested by the Director.

[324 § 501.1]

3. Permit Shield

Compliance with Condition IV.E shall be deemed compliance with Maricopa County Rule 324 § 304, 324 § 500 and 324 § 503.

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

F. Carbon Monoxide

1. Emission Limitations/Standards

a. The Permittee shall comply with one of the following requirements to

control CO emissions if the rated brake horsepower (bhp) of the existing spark ignition is greater than 250 bhp:

[324 § 304 Table 2]

i. The Permittee shall limit emissions to 4,500 ppmdv; or

ii. Employ a three way catalyst. The three way catalyst shall provide a minimum of 80% control efficiency for those engines fueled with natural gas, propane, or gasoline.

b. The Permittee shall comply with one of the following requirements to control CO emissions if the rated brake horsepower (bhp) of the new spark or compression ignition is greater than 250 bhp:

[324 § 304 Table 3]

i. The Permittee shall limit emissions to 4,500 ppmdv if the engine is either a new lean burn or rich burn spark engine; and

ii. The Permittee shall limit emissions to 1,000 ppmdv if the engine is a new compression ignition engine.

2. Monitoring, Recordkeeping, and Testing

[324 § 500, 503]

a. For new I.C. engines, compliance with the limitations listed in Condition IV.E.1 shall be demonstrated by either:

i. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture; or

ii. Performance of emission testing using the test methods listed in Section 503 of Maricopa County Rule 324.

b. For existing engines, compliance with the emission limitations shall be demonstrated by maintaining records under Condition IV.B.4. Emission testing shall be performed if requested by the Director.

[324 § 501.1]

3. Permit Shield

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

Compliance with Condition IV.F shall be deemed compliance with Maricopa County Rule 324 § 304, and 324 § 501.3.

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

G. Volatile Organic Compounds

1. Emission Limitations/Standards

The Permittee shall comply with one of the following requirements to control VOC emissions if the rated brake horsepower (bhp) of the existing spark ignition

is greater than 250 bhp:

[324 § 304 Table 2]

a. The Permittee shall limit emissions to 800 ppmdv or 5.0 g/bhp-hr; or

b. Employ a three way catalyst. The three way catalyst shall also provide a minimum of at least 50% control efficiency for VOC for those engines fueled by gasoline.

2. Monitoring, Recordkeeping, and Testing

[324 § 501.3]

a. For new I.C. engines, compliance with the limitations listed in Condition IV.F.1 shall be demonstrated by either:

i. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture; or

ii. Performance of emission testing using the test methods listed in Section 503 of Maricopa County Rule 324.

b. For existing engines, compliance with the emission limitations shall be demonstrated by maintaining records under Condition IV.B.4. Emission testing shall be performed if requested by the Director.

[324 § 501.1]

3. Permit Shield

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

Compliance with the terms of this Condition IV.G shall be deemed compliance with Maricopa County Rule 324 § 304 and 324 § 501.3.

V. FUGITIVE DUST

A. Emission and Operational Limitations

1. Opacity

For emissions that are not already regulated by an opacity limit, the Permittee shall not discharge or cause or allow to be discharged into the ambient air fugitive dust emissions exceeding 20% opacity.

[316 § 306.1]

2. Visible Emission Limitation Beyond Property Line

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

[316 § 306.2]

3. Wind Events

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

a. Has implemented the fugitive dust control measures described in Section V.B of Attachment "C", as applicable;

[316 § 306.3.a]

b. Has compiled and retained records, in accordance with Section V.C.3.f of Attachment "C", and has documented by records the occurrence of a wind event on the day(s) in question. The occurrence of a wind event must be determined by the nearest Maricopa County Air Quality Department monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked; and

[316 § 306.3.b]

c. Has implemented the following high wind fugitive dust control measures, as applicable:

[316 § 306.3.c]

i. For an active operation, implement one of the following fugitive dust control measures;

(a) Cease active operation that may contribute to an exceedance of the fugitive dust emission limitations described in Section V.A.1 of this Attachment for the duration of the wind event and, if active operation is ceased for the remainder of the work day, stabilize the area; or

(b) Before and during active operations, apply water or other suitable dust suppressant other than water to keep the soil moist.

ii. For an inactive open storage pile, implement one of the following fugitive dust control measures, in accordance with the test methods described in Condition V.D.2 of Attachment "C", and in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules:

(a) Maintain a soil crust by applying water or other suitable dust suppressant other than water or by implementing another fugitive dust control measure, in sufficient quantities to meet the stabilization standards described in Condition V.D.2 of Attachment "C".

(b) Cover open storage pile with tarps, plastic, or other material such that wind will not remove the covering, if open storage pile is less than eight feet high.

iii. For an inactive disturbed surface area, implement one of the following fugitive dust control measures, in accordance with the test methods described in Condition V.D.2 of Attachment "C", and in Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules:

(a) Uniformly apply and maintain surface gravel or a dust suppressant other than water; or

(b) Maintain a soil crust by applying water or other suitable dust suppressant other than water or by implementing another fugitive dust control measure, in sufficient quantities to meet the stabilization standards described in Condition V.D.2 of Attachment "C".

4. Silt Loading and Silt Content Standards

The Permittee shall not discharge or allow to be discharged into the ambient air from unpaved roads and unpaved parking and staging areas, fugitive dust emissions exceeding 20% opacity, in accordance with the test methods described in Condition I.D.6 of this Attachment or in Appendix C- fugitive Dust Test Methods of the Maricopa county Rules, and one of the following:

[316 § 306.4]

a. For unpaved roads, silt loading equal to or greater than 0.33 oz/ft^2; or silt content exceeding 6%.

b. For unpaved parking and staging areas, silt loading equal to or greater than 0.33oz/ft^2 or silt content exceeding 8%.

[316 § 306.4]

5. Stabilization Standards

a. The Permittee of a facility with an open area or a disturbed surface area on which no activity is occurring (including areas that are temporarily or permanently inactive) shall be considered in violation of this rule if such area is not maintained in a manner that meets at least one of the standards listed below, as applicable.

[316 § 306.5.a]

i. Maintain a soil crust;

ii. Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non -erodible elements of 100 cm/second or higher;

iii. Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;

iv. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;

v. Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;

vi. Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or

vii. Comply with a standard of an alternative test method, upon obtaining the written approval from the Director and the Administrator.

b. If no activity is occurring on an open storage pile and material handling or surface soils where support equipment and vehicles operate in association with such facility and if an open storage pile and material handling or surface soils where support equipment and vehicles operate in association with such facility contain more than one type of visibly distinguishable stabilization characteristics, soil, vegetation, or other characteristics, which are visibly distinguishable, the Permittee shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described Condition V.D of this Attachment.

[316 § 306.5.b]

B. Air Pollution Control Requirements

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

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 this rule.

[316 § 307]

1. Open Storage Piles and Material Handling

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

[316 § 307.1]

a. Prior to, and/or while conducting loading and unloading operations, implement one of the following fugitive dust control measures:

[316 § 307.1.a]

i. Spray material with water, as necessary; or

ii. Spray material with a dust suppressant other than water, as necessary.

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

[316 § 307.1.b]

i. Spray material with water, as necessary;

ii. Maintain a 1.5% or more soil moisture content of the open storage pile(s);

iii. Locate open storage pile(s) in a pit/in the bottom of a pit.

iv. Arrange open storage pile(s) such that storage pile(s) of larger diameter products are on the perimeter and act as barriers to/for open storage pile(s) that could create fugitive dust emissions;

v. Construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

vi. Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings.

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

[316 § 307.1.c]

i. Install the open storage pile(s) at least 25 feet from the property line; and

ii. Limit the height of the open storage pile(s) to less than 45 feet.

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

[316 § 307.1.d]

2. Surface Stabilization Where Support Equipment and Vehicles Operate

The Permittee shall implement one of the following fugitive dust control measures on areas other than areas identified in Condition V.B.3 or V.B.4, below, 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 a gravel pad, in compliance with the Condition V.B.6.b.iv of Attachment "C".

[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, or in the maintenance of, haul/access roads. Compliance with the provisions of this section shall not relieve any person subject to the requirements of this section of this rule from complying with any other federally enforceable requirements (i.e., a permit issued under Section 404 of the Clean Water Act).

[316 § 307.3.a]

i. Install and maintain bumps, humps, or dips for speed control and apply water, as necessary;

ii. Limit vehicle speeds and apply water, as necessary;

iii. Pave;

iv. Apply and maintain a gravel pad in compliance with Condition V.B.6.b.iv of Attachment "C";

v. Apply a dust suppressant, other than water; or

vi. Install and maintain a cohesive hard surface.

b. For a new facility, if it is determined that none of the fugitive dust control measures described in Condition V.B.3.a of Attachment "C", can be technically and feasibly implemented, then the Permittee shall maintain a minimum distance of 25 feet from the property line for 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.

[316 § 307.3.b]

4. On-Site Traffic

a. The Permittee shall require all batch trucks and material delivery trucks to remain on roads with paved surfaces or cohesive hard surfaces.

[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.

[316 § 307.4.b]

c. The Permittee shall require all batch trucks and material delivery trucks to enter and exit the facility/operation only through entrances that comply with the trackout requirements in Condition V.B.6 of Attachment "C".

[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.

[316 § 307.4.d]

5. Off-Site Traffic

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

a. Load all haul trucks such that the freeboard is not less than three inches;

[316 § 307.5.a]

b. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and

[316 § 307.5.b]

c. Cover haul trucks with a tarp or other suitable closure.

[316 § 307.5.c]

6. Trackout

a. Rumble Grate and Wheel Washer:

The Permittee of a new permanent facility and the Permittee of an existing permanent facility with a minimum of 60 aggregate trucks, mixer trucks, and/or batch trucks exiting a facility on any day onto paved public roadways/paved areas accessible to the public shall install, maintain, and use a rumble grate and wheel washer, in accordance with all of the following conditions, as applicable. A vehicle wash 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 (the Permittee shall have a water pressure gauge available on-site to allow verification of such water pressure), meets the definition of wheel washer (i.e., is capable of washing the entire circumference of each wheel of the vehicle), is operated in such a way that visible deposits are removed from the entire circumference of each wheel of the vehicle exiting the wash, is installed, maintained, and used in accordance with criteria listed below, and is approved in the Dust Control Plan for the facility.

[316 § 307.6.a]

i. The Permittee shall locate a rumble grate within 10 feet from a wheel washer.

(a) The rumble grate and wheel washer shall be located no less than 30 feet prior to each exit that leads to a paved public roadway/paved area accessible to the public and that is used by aggregate trucks, mixer trucks, and/or batch trucks.

(b) The Permittee may be allowed to install a rumble grate and wheel washers 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 rumble grate shall consist of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle as the entire circumference of each wheel of the vehicle passes over the rumble grate.

ii. The Permittee shall ensure that all aggregate trucks, mixer trucks, and/or batch trucks exit the facility via the rumble grate first and then the wheel washer.

iii. The Permittee shall post a sign by the rumble grate and wheel washer to designate the speed limit as 5 miles per hour.

iv. The Permittee shall pave the roads from the rumble grate and wheel washer to the facility exits leading to paved public roadways/paved areas accessible to the public.

v. The Permittee shall ensure that all aggregate trucks, mixer trucks, and/or batch trucks remain on the paved roads between the rumble grate and wheel washer and the facility exits leading to paved public roadways/paved areas accessible to the public.

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

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

[316 § 307.6.b]

i. A rumble grate, wheel washer, or truck washer shall be located no less than 30 feet prior to each exit that leads to a paved public roadway/paved area accessible to the public and that is used by aggregate trucks, mixer trucks, and/or batch trucks

(a) The Permittee may be allowed to install a rumble grate and wheel washers 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.

(b) A rumble grate shall consist of raised dividers (rails, pipes, or grates) a minimum of three inches tall, six inches apart, and 20 feet long, to allow a vibration to be produced such that dust is shaken off the wheels of a vehicle as the entire circumference of each wheel of the vehicle passes over the rumble grate.

ii. The Permittee shall ensure that all aggregate trucks, mixer trucks, and/or batch trucks exit the facility via a rumble grate, wheel washer, or truck washer.

iii. The Permittee shall post a sign by the rumble grate, wheel washer, or truck washer to designate the speed limit as 5 miles per hour.

iv. If haul/access roads are unpaved between the rumble grate, wheel washer, or truck washer and the facility exits leading to paved public roadways/paved areas accessible to the public, a gravel pad shall be installed, maintained, and used from the rumble grate, wheel washer, or truck washer to such paved public roadways/paved areas accessible to the public in accordance with all of the following:

(a) Gravel pad shall be designed with a layer of washed gravel, rock, or crushed rock that is at least one inch or larger in diameter and 6 inches deep, 30 feet wide, and 50 feet long and shall be flushed with water or completely replaced as necessary to comply with the trackout threshold described in Condition V.B.6.d of Attachment "C".

(b) Gravel pad shall have a gravel pad stabilizing mechanism/device (i.e., curbs or structural devices along the perimeter of the gravel pad) and shall be flushed with water or completely replaced as necessary to comply with the trackout threshold described in Condition V.B.6.d of Attachment "C".

c. Exemptions for Wheel Washers:

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

[316 § 307.6.c]

i. A facility 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 owner and/or operator of the facility shall install, maintain, and use a rumble grate in

compliance with Condition V.B.6.b of Attachment "C".

ii. A facility is less than 5 acres in land size and handles recycled asphalt and recycled concrete exclusively. The owner and/or operator of the facility shall install, maintain, and use a rumble grate in compliance with Condition V.B.6.b of Attachment "C", and shall install a gravel pad in compliance with Condition V.B.6.b.iv of Attachment "E", on all unpaved roads leading to the facility exits leading to paved public roadways/paved areas accessible to the public.

iii. A facility has a minimum of ¼ mile paved roads leading from a rumble grate to the facility exits leading to paved public roadways/paved areas accessible to the public.

iv. If the facility meets the definition of infrequent operations, then the Permittee shall

(a) Install, maintain, and use a rumble grate in compliance with Condition V.B.6.b of Attachment "C", and shall install a gravel pad in compliance with Condition V.B.6.b.iv of Attachment "C". 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 public roadways/paved areas accessible to the public.

(b) Keep records in accordance with Condition V.C of Attachment "C", as applicable.

(c) 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 V.B.6, as applicable.

d. Trackout Distance:

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

[316 § 307.6.d]

e. Cleaning Paved Roads Identified in the Dust Control Plan:

The Permittee shall clean all paved roads identified in the dust Control Plan in accordance with all of the following as applicable:

[316 § 307.6.e]

i. If the Permittee has a minimum of 60 aggregate trucks, mixer trucks, and/or batch trucks exiting the facility on any day then the Permittee 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.

ii. The Permittee with less than 60 aggregate trucks, mixer 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. On the days that paved roads are not swept, The Permittee shall apply water on at least 100 feet of internal roads or the entire length of paved roads leading to an exit to paved public roadways/paved areas accessible to the public, if such roadways are less than 100 feet long.

iii. The Permittee, who purchases street sweepers after June 8, 2005, shall purchase street sweepers that meet the criteria of PM_{10} efficient South Coast Air Quality Management Rule 1186 certified street sweepers.

iv. The Permittee of a new facility shall use South Coast Air Quality Management Rule 1186 certified street sweepers to sweep paved roads.

7. Pad Construction for Processing Equipment

The Permittee shall implement, maintain, and use fugitive dust control measures during the construction of pads for processing equipment so as to meet all of the applicable requirements of this section and shall identify, in the Dust Control Plan, such fugitive dust control measures.

[316 § 307.7]

8. Spillage

In addition to complying with the fugitive dust emission limitations described in Condition V.A of Attachment "C" and implementing fugitive dust control measures described in Conditions V.B.1 through V.B.7 of Attachment "C" , as applicable, The Permittee shall implement the following fugitive dust control measures, as applicable, when spillage occurs:

[316 § 307.8]

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

b. Maintain in a stabilized condition any pile of spillage on paved haul/access roads/paved roads and remove such pile by the end of each day; and

c. Maintain in a stabilized condition all other piles of spillage with dust

d. Suppressants until removal.

9. Night-Time Operations

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

[316 § 307.9]

C. Monitoring, Recordkeeping, and Reporting

1. Fugitive Dust Control Technician

The Permittee with a rated or permitted capacity of 25 tons or more of material per hour or with five acres or more of 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:

[316 § 309]

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 this rule.

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.

c. Be authorized by the owner and/or operator of the facility to install, maintain, and use fugitive dust control measures, deploy resources, and shutdown or modify activities as needed.

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

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.

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.

2. Basic Dust Control Training Class

a. At least once every three years, the site superintendent or other designated on-site representative of the Permittee, if present at a site that has more than one acre of disturbed surface area that is subject to a permit issued by the Director requiring control of PM_{10} emissions from dust generating operation, shall successfully complete a Basic Dust Control Training Class conducted or approved by the Director.

[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.

[316 § 310.2]

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

[316 § 310.3]

d. Basic Dust Control Training Class Records

The Permittee shall compile, maintain, and retain a written record for each employee subject to the Basic Dust Control Training Class. 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 the class.

[316 § 501.5]

3. Dust Control Plan

a. The Permittee shall submit, to the Director, a Dust Control Plan that describes all fugitive dust control measures to be implemented, in order to comply with this permit.

[316 § 311.1]

b. The Permittee shall submit to the Director a Dust Control Plan that describes all equipment associated with any process fugitive emissions to be implemented, in order to comply with this permit as well as the documentation specified below. If an alternative plan for conducting required soil moisture tests is approved by the Director, included in a Dust Control Plan, and implemented by the Permittee and if the Director determines that such alternative plan included in a Dust Control Plan has been followed, yet fugitive dust emissions still exceed the standards of this permit, then the Director shall issue a written notice to the Permittee explaining such determination. The Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Director within three working days of receipt of the Director's written notice, unless such time period is extended by the Director, upon request, for good cause. During the time that such Permittee must still comply with all requirement of this Section.

i. Documentation for the soil moisture content in order to comply with Condition II.B of this Attachment

ii. Documentation of soil moisture analysis for each move notice regarding portable sources.

[316 § 311.2]

iii. The Dust Control Plan shall contain all the information described in Rule 310-Fugitive Dust from Dust Generating Operations from the Maricopa County Rules.

[316 § 311.3]

c. All other criteria associated with the Dust Control Plan shall meet the criteria described in Rule 310-Fugitive Dust from Dust Generating Operations from Maricopa County Rules.

[316 § 311.4]

d. The Director shall approve, disapprove, or conditionally approve the Dust Control Plan, in accordance with the criteria used to approve, disapprove, or conditionally approve a permit. Failure to comply with the provisions of an approved Dust Control Plan shall be deemed a violation of Section V of this Attachment.

[316 § 311.5]

e. With each move notice regarding portable sources, the Permittee of a facility shall submit, to the Director, a Dust Control Plan that meets the requirements of Section V of this Attachment.

[316 § 311.6]

f. Dust Control Plan Records

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

[316 § 501.4]

4. Opacity Monitoring

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

[316 § 503]

5. 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:

a. Facility name and Permittee's name;

b. Current number of the air quality permit or of authority to operate under a general permit;

c. Name and local phone number of the person(s) responsible for dust control matters; and

d. Text stating: "Dust Complaints? Call Maricopa County Air Quality Department – (602) 372-2703, or the Arizona Department Of Environmental quality at (602) 771-2286."

[316 § 308]

D. Testing Requirements

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

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

2. The stabilization standards described in Condition V.A.5 of Attachment "C" shall be determined by using the following test methods in accordance with Appendix C (Fugitive Dust Test Methods) of the Maricopa County Rules:

a. Soil Moisture Content and Soil Compaction Characteristic Test Methods

[316 § 504]

i. ASTM Method D2216-05 ("Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass"), 2005 edition

ii. ASTM Method D1557-02e1 (2002) ("Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort

b. Stabilization Standards Test Methods

[316 § 505]

i. Appendix C, Section 2.1.2 (Silt Content Test Method) of these rules to estimate the silt content of the trafficked parts of unpaved roads (not to exceed 6%) and unpaved parking lots (not to exceed 8%).

ii. Appendix C, Section 2.3 (Test Methods for Stabilization-Soil Crust Determination) (The Drop Ball Test) of Maricopa County rules for a soil crust.

iii. Appendix C, Section 2.4 (Test Methods for Stabilization-Determination Of Threshold Friction Velocity (TFV)) (Sieving Field Procedure) of Maricopa County rules for threshold friction velocity (TFV) corrected for non-erodible elements of 100 cm/second or higher.

iv. Appendix C, Section 2.5 (Test Methods for Stabilization-Determination Of Flat Vegetative Cover) of 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%.

v. Appendix C, Section 2.6 (Test Methods for Stabilization-Determination Of Standing Vegetative Cover) of 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%.

vi. Appendix C, Section 2.6 (Test Methods for Stabilization-Determination Of Standing Vegetative Cover) of 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.

vii. Appendix C, Section 2.7 (Test Methods for Stabilization-Rock Test Method) of Maricopa County rules for a percent cover that is equal to or greater than 10%, for non-erodible elements.

viii. An alternative test method approved in writing by the Director and the Administrator.

E. Permit Shield

Compliance with Condition V shall be deemed compliance with the following Maricopa County Rules: 316 § 306.1, 316 § 306.2, 316 § 306.3, 316 § 306.4, 316 § 306.5, 316 § 307.1, 316 § 307.2., 316 § 307.3, 316 § 307.4, 316 § 307.5, 316 § 307.6, 316 § 307.7, 316 § 307.8, 316 § 307.9, 316 § 308, 316 § 309, 316 § 310, 316 § 311, 316 § 501, 316 § 503, 316 § 504, and 316 § 505.

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

VI. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

1. Applicability

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

a. Self-contained, enclosed abrasive blasting equipment that is not vented to the atmosphere or is vented inside a building with the exhaust directed away from any opening to the building exterior, or

b. Hydroblasting.

[312 §103]

2. Limitations for Blasting

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

. [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;

[312 §302]

a. Wet abrasive blasting,

b. Vacuum blasting, or

c. Dry abrasive blasting, provided that all of the following conditions are met:

i. Perform only on a metal substrate.

ii. Use only certified abrasive for dry unconfined blasting.

iii. Blast only paint that is lead free (i.e. the lead content is less than 0.1 percent).

iv. Perform the abrasive blasting operation directed away from unpaved surfaces.

v. Use the certified abrasive not more than once unless contaminants are separated from the abrasive through filtration and the abrasive conforms to its original size.

4. Requirements for confined blasting

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

[312 §303]

a. Using a certified abrasive, or

b. Venting to an ECS.

5. Requirements for ECS and Monitoring Devices:

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

[312 §304]

i. Is self-contained and the total internal volume of the blast section is 50 cubic feet or less, and

ii. Is vented to an ECS.

b. Operation and Maintenance (O&M) Plan Required for Emission Control System (ECS):

[312 §304.1]

i. The Permittee shall provide and maintain, readily available at all times, an O&M Plan for any ECS, other emission processing equipment, and ECS monitoring devices that are used pursuant to Condition VI.A.5.b above, or to an air pollution control permit.

ii. The Permittee shall submit to the Director for approval the O&M Plans of each ECS and each ECS monitoring device that is used pursuant to Condition VI.A.5 above.

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

c. Installing and Maintaining ECS Monitoring Devices

The Permittee operating an ECS pursuant to this Sectiont 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.

[312 §304.2]

6. Opacity Limitation

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

[312 §305]

7. Wind Event

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

[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:

[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

[312 §308]

a. Unconfined Blasting

b. 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.

c. Confined Blasting

d. 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 Condition shall keep the following records onsite that are applicable to all abrasive blasting operations

[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:

i. A list of the blasting equipment,

ii. The description of the type of blasting as confined, unconfined, sand, wet, or other,

iii. The locations of the blasting equipment or specify if the equipment is portable,

iv. A description of the ECS associated with the blasting operations,

v. The days of the week blasting occurs, and

vi. The normal hours of operation.

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

i. The date the blasting occurs,

ii. The blasting equipment that is operating,

iii. A description of the type of blasting, and

iv. A description of the ECS associated with the blasting operations,

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

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.

11. Records Retention

Copies of reports, logs, and supporting documentation required by this Condition shall be retained for at least 2 years.

[312 §502]

12. Compliance Determination

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

[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.

[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:

[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.

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.

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

14. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with Maricopa County Rule 312 §103, Maricopa County Rule 312 §301, Maricopa County Rule 312 §302, Maricopa County Rule 312 §303, Maricopa County Rule 312 §304, Maricopa County Rule 312 §304.1, Maricopa County Rule 312 §304.2, Maricopa County Rule 312 §305, Maricopa County Rule 312 §306, Maricopa County Rule 312 §307, Maricopa County Rule 312 §308, Maricopa County Rule 312 §501, Maricopa County Rule 312 §502, Maricopa County Rule 312 §503.1 and 2, and Maricopa County Rule 312 §505.

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

B. Spray Coating Operations

1. Controls Required

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

a. Equipment Operated In Enclosures Located Outside a Building:

[315§301.1]

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

i. Three-Sided Enclosures:

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

ii. More Complete Enclosures:

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

c. Equipment Operated With Forced Air Exhaust Vented Directly Outside:

[315§301.2]

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

2. Exemptions

[315 §302]

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

a. To the spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating.

b. To the spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or

spray booth and which are not normally dismantled or moved prior to coating.

c. To the spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10′W x 25′L x 8′H.

d. To enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air.

e. To any coating operations utilizing only hand-held aerosol cans.

3. Permit Shield

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

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

AIR QUALITY CONTROL GENERAL PERMIT

FOR CRUSHING AND SCREENING PLANTS

ATTACHMENT "D": ADDITIONAL CONDITIONS INSIDE PIMA COUNTY

I. GENERAL CONDITIONS

While operating in Pima County the Permittee shall comply with the conditions set forth in this Attachment.

II. CRUSHING AND SCREENING FACILITY REQUIREMENTS

[P.C.C. §§ 17.16.370]

A. Applicability

1. 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]

2. Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance Condition III of Attachment "D".

   [P.C.C. §§ 17.16.370.E]

3. Permit Shield

   Compliance with Condition II.A shall be deemed compliance with P.C.C. §§ 17.16.370.A and P.C.C. §§ 17.16.370.E.

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

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

   a. Permittee shall not 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:

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

      [P.C.C. §§ 17.16.370.B.1]

$$E = 3.59\ P^{0.62}$$

where:

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

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

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

[P.C.C. §§ 17.16.370.B.2]

$$E = 17.31\ P^{0.16}$$

where "E" and "P" are defined as above

iii. The actual values shall be calculated from the applicable equations and rounded off to two decimal places.

[P.C.C. §§ 17.16.370.C]

b. The opacity of any plume or effluent shall not be greater than the opacity limit for "Other Sources" in Table 2 of Section V of Attachment “D”.

[P.C.C §§ 17.16.710]

2. Permit Shield

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

Compliance this Condition II.B shall be deemed compliance with P.C.C. §§ 17.16.370 and P.C.C. §§ 17.16.710.

III. CONCRETE BATCH PLANTS

A. Emission Limitations

Fugitive emissions from concrete batch plants shall be controlled in accordance with P.C.C. §§ 17.16.070 through P.C.C. §§ 17.16.110.

[P.C.C. §§ 17.16.380]

B. Permit Shield

Compliance with Condition III shall be deemed compliance with P.C.C. §§ 17.16.380

IV. FUGITIVE DUST REQUIREMENTS

A. Fugitive Dust Producing Activities

[P.C.C. §§ 17.16.060]

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

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

3. The Permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate this permit. (Ord. 1994-83 § 50, 1994; Ord. 1993-128 § 4, 1993; Ord. 1979-93 (part), 1979)

B. Vacant Lots and Open Spaces

[P.C.C. §§ 17.16.080]

1. The Permittee shall minimize dust emissions from the construction, use, alteration, repair, demolition, clearing, leveling, or excavation of any vacant lot, parking area, housing plot, building site, sales lot, playground, livestock feedlot, or other open area, other than those solely used for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes, by intermittently applying water or other effective dust suppressants to the area, paving, detouring, barring access, or other equivalently effective controls.

2. No vacant lot, housing plot, building site, parking area, sales lot, playground, livestock feedlot, or other open area - other than those used solely for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes - shall be left in such a state after construction, alteration, clearing, leveling, or excavation that naturally induced wind blowing over the area causes visible emissions of airborne dust to diffuse beyond the property lines within which the emissions become airborne. Dust emissions must be permanently suppressed by landscaping, covering with gravel or vegetation, paving, or applying equivalently effective controls.

3. This Section shall not apply when wind speeds exceed twenty-five miles per hour (as recorded by the National Weather Service or as estimated by an enforcement officer using the Beaufort Scale of Wind Speed Equivalents) unless control measures have not been taken or were not commensurate with the size or scope of the sources of dust.

C. Roads and Streets

[P.C.C. §§ 17.16.090]

1. Dust emissions from the construction phase of a new road must be minimized by applying the same measures specified in Condition III.A of Attachment “D”.

2. No new unpaved private driveway shall be constructed unless the road will not be used by more vehicular traffic than that associated with a one - or two-family private residence, and the road will not be adjacent to any recreational, institutional, educational, or retail sales facility.

3. No new unpaved service road or unpaved haul road shall be constructed unless dust will be suppressed after construction by intermittently watering, limiting access, or applying chemical dust suppressants to the road, in such a way that visible dust emissions caused by vehicular traffic on the road do not violate section 17.16.050.

4. No new road other than a private driveway shall be constructed unless the paving specifications are those defined by, or equivalent to those of, the planning department and/or highway department of the jurisdictional agency.

5. The surfacing of roadways with asbestos tailings is prohibited.

D. Particulate Materials

[P.C.C. §§ 17.16.100]

1. No person shall 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.

E. Fugitive dust emissions standards for motor vehicle operation

[P.C.C. §§ 17.16.070]

1. No person shall 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. No person shall 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 section. In lieu of issuing a notice to appear, peace officers may file a violation report with the control officer, requesting him to file a complaint alleging a violation of this section pursuant to A.R.S. 49-502. (Ord. 1995-87 § 42, 1995: Ord. 1993-128 § 4 (part), 1993)

F. Permit Shield

Compliance with Condition IV shall be deemed compliance with P.C.C. §§ 17.16.060, P.C.C. §§ 17.16.070, P.C.C. §§ 17.16.080, P.C.C. §§ 17.16.090, and P.C.C. §§ 17.16.100.

V. OTHER SPECIFIC REQUIREMENTS

A. Fuel Requirements

[P.C.C. §§ 17.16.010.C]

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

B. Opacity Limitations

1. The Permittee shall not cause or permit the effluent from a single emission point, multiple emission point, or fugitive emissions source to have an average optical density equal to or greater than the opacity limiting standards specified in Table 4 at the end of this Condition, or as otherwise specified in this permit, subject to the following provisions:

[P.C.C. §§ 17.16.040]

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 2 of this Section. 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.

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. Except for sources located within the boundaries of the Tohono O'Odham, Pasqua-Yaqui, and San Xavier Indian Reservations, opacity of an emission from any non-point source, as measured in accordance with the Arizona Testing manual, Reference Method 9, shall not exceed the following:

[P.C.C. §§ 17.16.050.B]

a. 20 percent for such non-point sources in Eastern Pima County, east of the eastern boundary of the Tohono O'Odham Reservations.

b. 40 percent for such non-point sources in all other areas of Pima County.

TABLE 2: EMISSIONS-DISCHARGE OPACITY LIMITING STANDARDS

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

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

[2] Applicable to a diesel engine being accelerated under load.

[3] Any source not otherwise specifically covered within this table.

(Ord. 1993-128 4, 1993; Ord. 1979-93 (part), 1979)

C. Visibility Limiting Standard

[Pima County Applicable SIP Rule 343 and P.C.C. §§ 17.16.050]

1. 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.

a. 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.

b. Condition V.C.1 above 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.

c. The exception in Condition V.C.1.b above 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.

d. Any disregard of, neglect of, or inattention to other controls required herein, during any time when Condition V.C.1.b above, is in effect, shall automatically waive the exception in Condition V.C.1.b above , and such relaxation of controls shall be a violation.

D. Permit Shield

Compliance with Conditions of this Section shall be deemed compliance with .C.C. § 17.16.010, P.C.C. § 17.16.040, P.C.C. § 17.16.050 and SIP Rule 343.

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

AIR QUALITY CONTROL GENERAL PERMIT

FOR CRUSHING AND SCREENING PLANTS

ATTACHMENT "E": ADDITIONAL CONDITIONS INSIDE PINAL COUNTY

I. GENERAL CONDITIONS

While operating in Pinal County the Permittee shall comply with the Conditions set forth in this Attachment.

II. CRUSHING AND SCREENING REQUIREMENTS

A. Applicability

The provisions of this article are applicable to the following affected facilities: primary rock crushers, secondary rock crushers, tertiary rock crushers, screens, conveyors and conveyor transfer points, stackers, reclaimers, and all gravel or crushed stone processing plants and rock storage piles. [Pinal Code §5-5-180]

B. Particulate Matter Emissions

1. Emission Limitation and Standards

   Fugitive emissions from gravel or crushed stone processing plants shall be controlled in accordance with Chapter 4, Article 2 of the Pinal County Rules. [Pinal Code §5-5-190.D]

2. Permit Shield

   Compliance with the conditions of this Section shall be deemed compliance with Pinal Code § 5-5-190.A, Pinal Code § 5-5-190.C, Pinal Code § 5-5-190.D, Pinal Code § 5-5-200.A and Pinal Code § 5-5-200.B.

III. FUGITIVE DUST EMISSIONS REQUIREMENTS

Particulate Matter Emissions

A. Emission Limitations and Standards

[Pinal County 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. In wind gusts above 25 miles per hour, discontinue/cease explosive blasting; and

   b. Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

[Pinal County Code 4-7-230.N]

B. Monitoring and Record Keeping Requirements

[Pinal County Code 4-2-050]

1. Opacity observations shall not be made or additional preventive measures required when the wind speed instantaneously exceeds 25 mph or when the average wind speed is greater than 15 mph.

2. The average wind speed determination shall be on a 60 minute average from the nearest Air Quality Control District monitoring station or by a wind instrument located at the site being monitored.

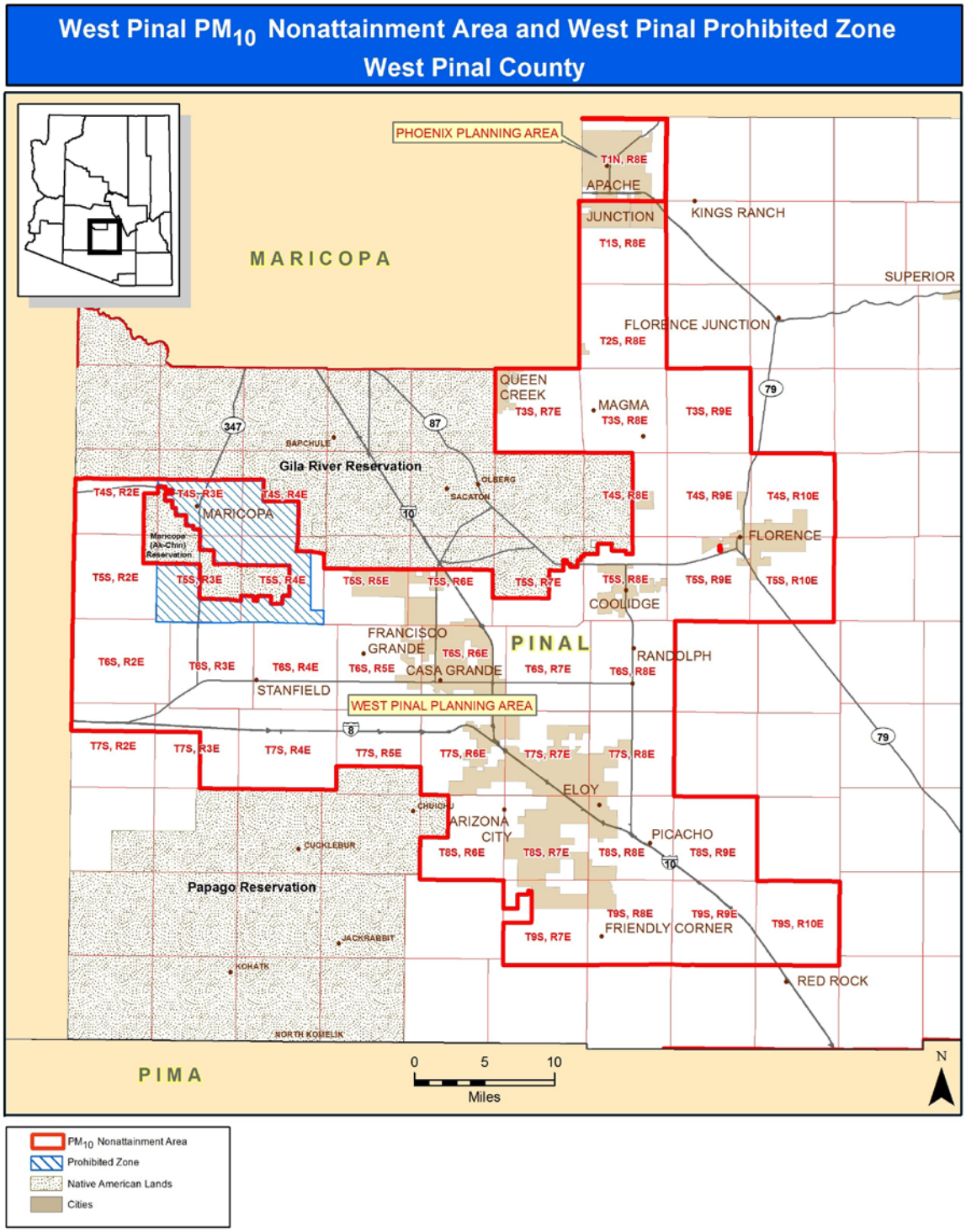
C. Permit Shield

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

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

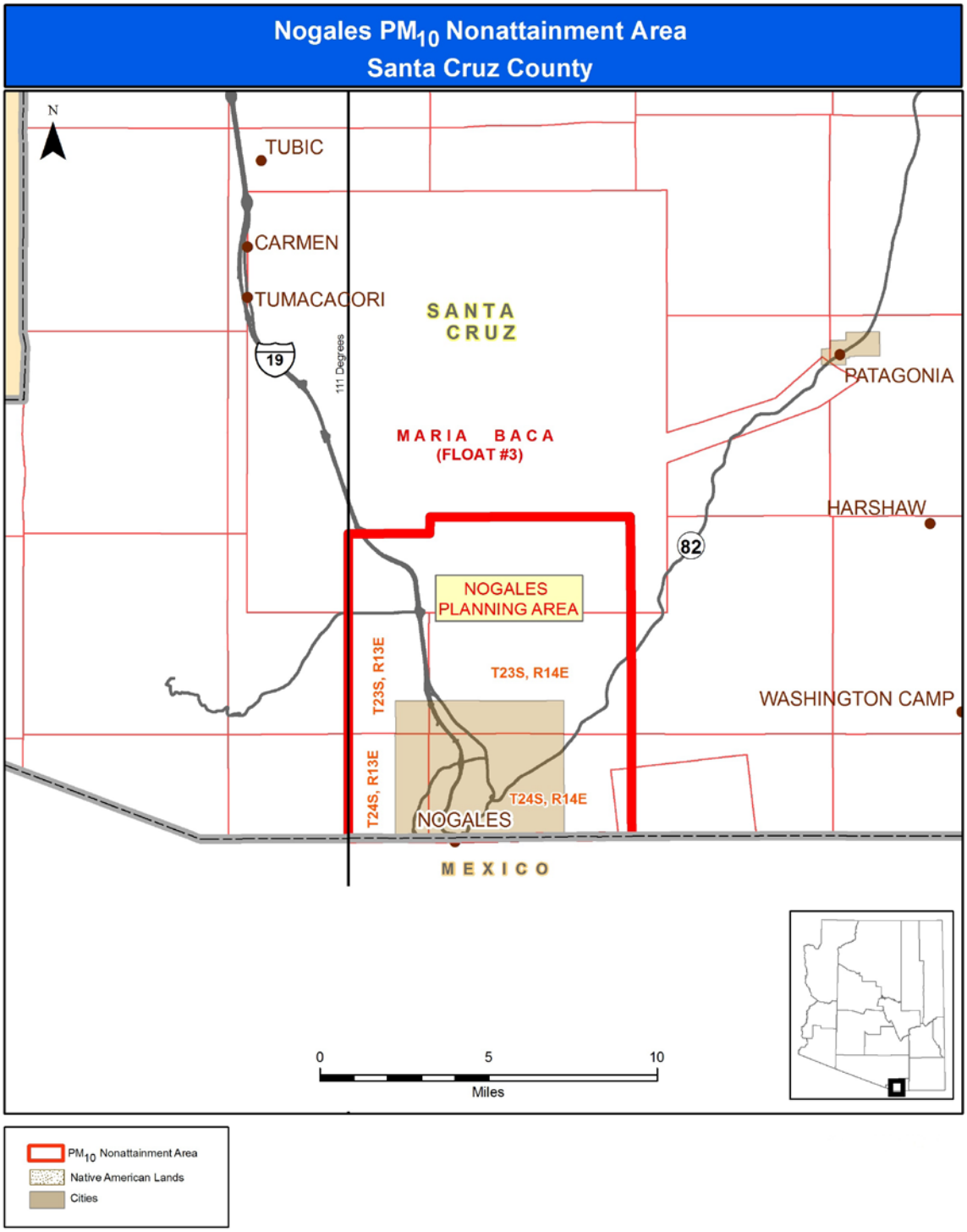
APPENDIX "A"

AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS MAP OF THE PINAL COUNTY PROHIBITED AND NONATTAINMENT AREAS



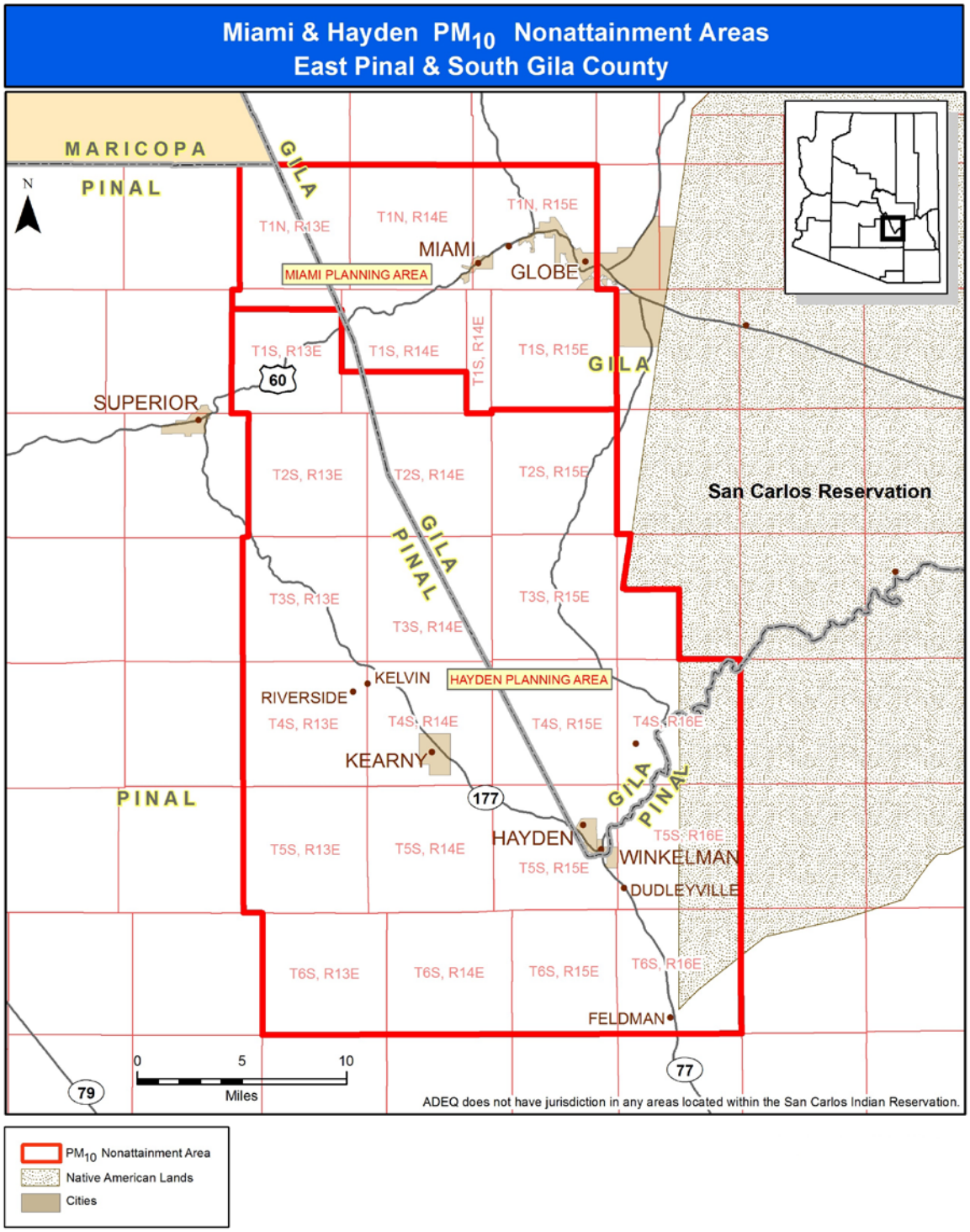
APPENDIX "B"

AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS
MAP OF THE SANTA CRUZ COUNTY NONATTAINMENT AREAS



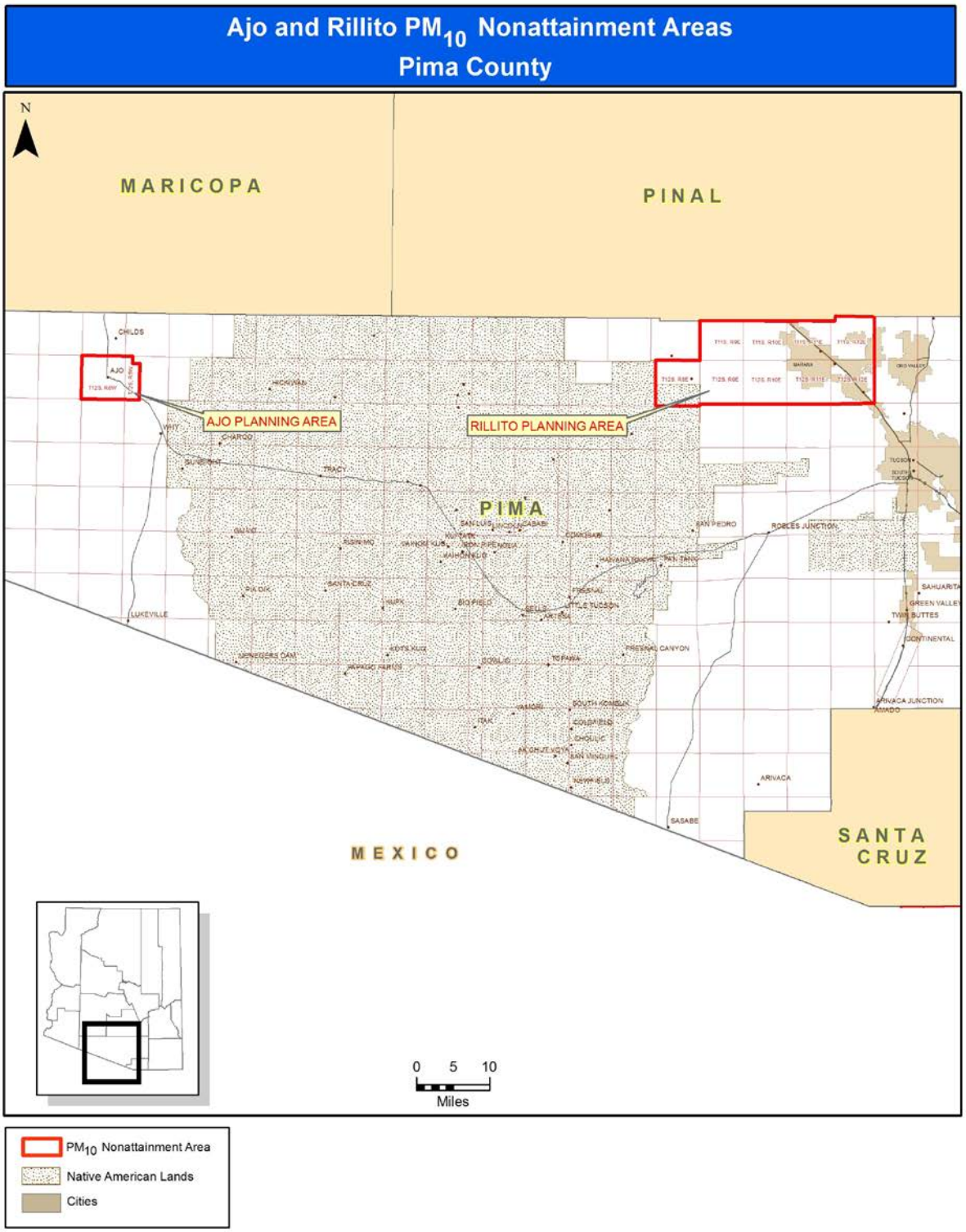
APPENDIX "C"

AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS MAP OF THE PINAL AND GILA COUNTY PM_{10} NONATTAINMENT AREAS



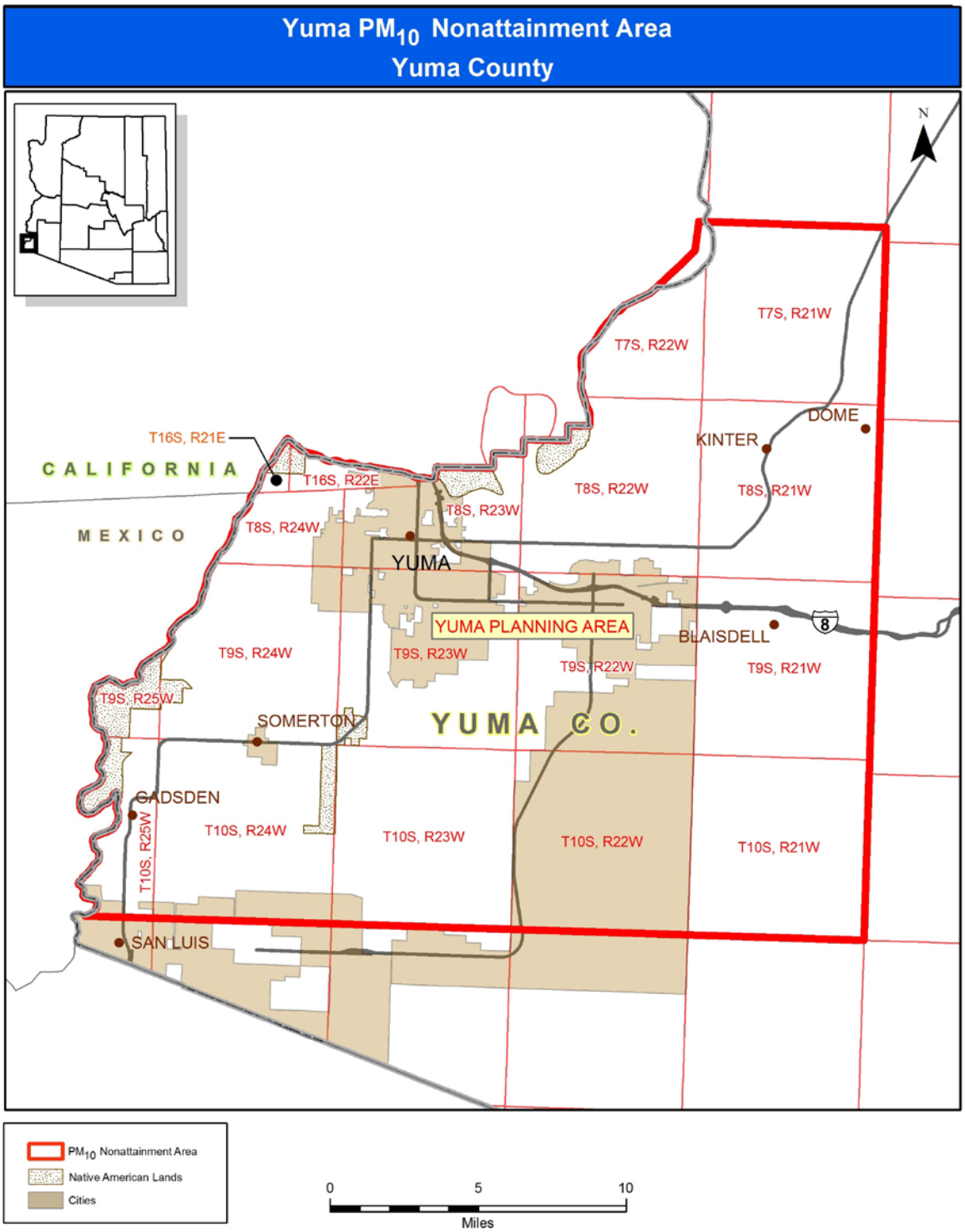
APPENDIX "D"

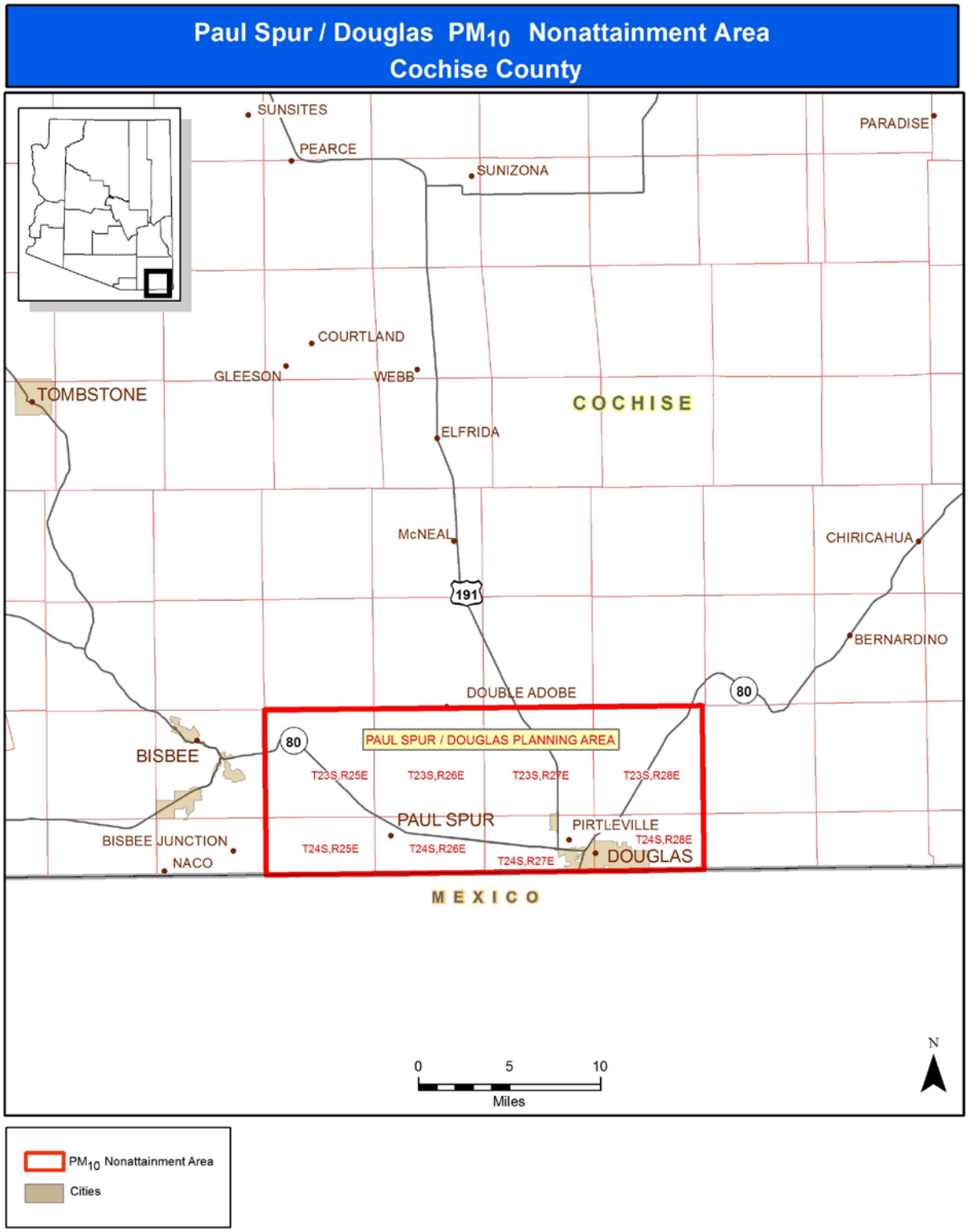
AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS
MAP OF THE PIMA COUNTY NONATTAINMENT AREAS



APPENDIX "E"

AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS MAP OF THE YUMA COUNTY NONATTAINMENT AREAS



APPENDIX "F"

AIR QUALITY CONTROL GENERAL PERMIT FOR HOT MIX ASPHALT PLANTS MAP OF THE COCHISE COUNTY NONATTAINMENT AREAS