

# AIR QUALITY CONTROL

## GENERAL PERMIT

### For TITLE V

# AIR CURTAIN INCINERATORS

(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 \_\_\_\_\_ PERMIT CLASS I EXPIRATION DATE \_\_\_\_\_

PERMIT ISSUED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_,

\_\_\_\_\_  
SIGNATURE

**Timothy S. Franquist, Air Quality Division**

\_\_\_\_\_  
TITLE

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## ATTACHMENT "A": GENERAL PROVISIONS

### I. PERMIT EXPIRATION AND RENEWAL

- A. This permit is valid for a period of five (5) years from the date of issuance.  
[ARS § 49-426.F, A.A.C. R18-2-306.A.1]
- B. The Permittee shall submit an application for renewal of this permit at least six (6) months, but not more than eighteen (18) months, prior to the date of permit expiration.  
[A.A.C. R18-2-304.D.2]

### II. COMPLIANCE WITH PERMIT CONDITIONS

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona Revised Statutes (A.R.S.) Title 49, Chapter 3, and the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.  
[A.A.C. R18-2-306.A.8.a]
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
[A.A.C. R18-2-306.A.8.b]

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

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
[A.A.C. R18-2-306.A.8.c]
- B. The permit shall be reopened and revised under any of the following circumstances:
  - 1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of the terms and conditions has been extended pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term;  
[A.A.C. R18-2-321.A.1.a]
  - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit;

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

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; and

[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]

- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

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

#### **IV. POSTING OF PERMIT**

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

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

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

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

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

#### **V. FEE PAYMENT**

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

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

#### **VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE**

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

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

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

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

## VII. COMPLIANCE CERTIFICATION

- A.** The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15<sup>th</sup>, and shall report the compliance status of the source during the period between October 1<sup>st</sup> of the previous year and March 31<sup>st</sup> of the current year. The second certification shall be submitted no later than November 15<sup>th</sup>, and shall report the compliance status of the source during the period between April 1<sup>st</sup> and September 30<sup>th</sup> of the current year.

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

- B.** The compliance certifications 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 methods 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. 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 certifications shall identify each deviation (including any deviations reported pursuant to Condition XI.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification;

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

4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;

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

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 copy of all compliance certifications shall also be submitted to the EPA Administrator.

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

- D.** If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above. The progress reports shall contain the information required by A.A.C R18-2-309.5.d.

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

## VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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

**IX. INSPECTION AND ENTRY**

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

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

**X. ACCIDENTAL RELEASE PROGRAM**

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

[40 CFR Part 68]

**XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING**

- A. Excess Emissions Reporting  
[A.A.C. R18-2-310.01.A, B, and C]
  - 1. Excess emissions shall be reported as follows:
    - a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
      - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.b below.
      - (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XI.A.1.a(1) above.  
[A.A.C. R18-2-310.01.A]

b. The report shall contain the following information:

- (1) Identity of each stack or other emission point where the excess emissions occurred;  
[A.A.C. R18-2-310.01.B.1]
- (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;  
[A.A.C. R18-2-310.01.B.2]
- (3) Time and duration, or expected duration, of the excess emissions;  
[A.A.C. R18-2-310.01.B.3]
- (4) Identity of the equipment from which the excess emissions emanated;  
[A.A.C. R18-2-310.01.B.4]
- (5) Nature and cause of such emissions;  
[A.A.C. R18-2-310.01.B.5]
- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions;  
[A.A.C. R18-2-310.01.B.6]
- (7) Steps that were or are being taken to limit the excess emissions; and  
[A.A.C. R18-2-310.01.B.7]
- (8) If the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with any permit procedures governing source operation during periods of startup or malfunction.  
[A.A.C. R18-2-310.01.B.8]

2. In the case of continuous or recurring excess emissions, the notification requirements shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XI.A.1 above.  
[A.A.C. R18-2-310.01.C]

**B. Permit Deviations Reporting**

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable



requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

1. Notice that complies with Condition XI.A.1 above is prompt for deviations that constitute excess emissions;  
[A.A.C. R18-2-306.A.5.b.i]
2. Notice that is submitted within two working days of discovery of the deviation is prompt for deviations of permit conditions identified by Condition III.B.1 of Attachment “B”;  
[A.A.C. R18-2-306.A.5.b.ii]
3. Except as provided in Conditions XI.B.1 and 2 above, prompt notification of all other types of deviations shall be every 6-months, concurrent with the semi-annual compliance certifications required in Section VII, and can be submitted via the “Annual/Semiannual Deviation Monitoring Report” form available on the Arizona Department of Environmental Quality Website.  
[A.A.C. R18-2-306.A.5.b.ii]

### 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 technology-based emission limitations if Condition XI.C.3 below 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 of the emergency;  
[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**

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

[ARS § 49-426.I.3]

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

1. Applicability

A.A.C. R18-2-310 establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

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

[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 A.A.C. R18-2-310.01 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 A.A.C. R18-2-310.01 and has demonstrated all of the following:

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

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

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

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

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

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

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

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

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

- (5) 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]

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

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

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

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

- (8) 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, the Permittee shall demonstrate, through submission of the data and information required by this Condition XI.E and Condition XI.A.1 above, 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. RECORDKEEPING REQUIREMENTS**

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

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

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

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

### **XIII. REPORTING REQUIREMENTS**

The Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII above. [A.A.C. R18-2-306.A.5.a]
- B. Excess emission; permit deviation, and emergency reports in accordance with Section XI above. [A.A.C. R18-2-306.A.5.b]
- C. Other reports required by any condition of 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 revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality. [A.A.C. R18-2-304.G and -306.A.8.e]
- B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. [A.A.C. R18-2-304.H]

### **XV. PERMIT AMENDMENT OR REVISION**

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

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

### **XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION**

- A. The Permittee may make changes that do not contravene an express permit term or condition without a permit revision if all of the following apply:

[A.A.C. R18-2-317]

1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(24);  
[A.A.C. R18-2-317.A.1]
  2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;  
[A.A.C. R18-2-317.A.2]
  3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;  
[A.A.C. R18-2-317.A.3]
  4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A;  
[A.A.C. R18-2-317.A.4]
  5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements; and  
[A.A.C. R18-2-317.A.5]
  6. The changes do not constitute a minor NSR modification.  
[A.A.C. R18-2-317.A.6]
- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVI.A, C, and D of this Attachment.  
[A.A.C. R18-2-317.B]
- C.** For each change under Conditions XVI.A and XVI.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.  
[A.A.C. R18-2-317.D]
- D.** Each notification shall include:
1. When the proposed change will occur;  
[A.A.C. R18-2-317.E.1]
  2. A description of the change;  
[A.A.C. R18-2-317.E.2]
  3. Any change in emissions of regulated air pollutants; and  
[A.A.C. R18-2-317.E.3]
  4. Any permit term or condition that is no longer applicable as a result of the change.  
[A.A.C. R18-2-317.E.7]

**E.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section XVI.

[A.A.C. R18-2-317.F]

**F.** Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section XVI.

[A.A.C. R18-2-317.G]

**G.** Notwithstanding any other part of Section XVI, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under Section XVI over the term of the permit, do not satisfy Condition XVI.A above.

[A.A.C. R18-2-317.H]

## **XVII. TESTING REQUIREMENTS**

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

**A.** Except as provided in Condition XVII.F below, the Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

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

**B.** Operational Conditions during Performance Testing

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

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

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

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

**D.** Test Plan

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

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

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

**E.** Stack Sampling Facilities



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

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

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

**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.

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

**G. Report of Final Test Results**

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

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

**H. Extension of Performance Test Deadline**

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

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

1. If a force majeure event is about to occur, occurs, or has occurred for which the Permittee intends to assert a claim of force majeure, the Permittee shall notify the Director in writing as soon as practicable following the date the Permittee first knew, or through due diligence should have known that the event may cause or

caused a delay in testing beyond the regulatory deadline. The notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall be given as soon as practicable.

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

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

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

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

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

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

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

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

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

## **XVIII. PROPERTY RIGHTS**

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

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

## **XIX. SEVERABILITY CLAUSE**

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

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

## **XX. PERMIT SHIELD**

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

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

**XXI. PROTECTION OF STRATOSPHERIC OZONE**

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

[40 CFR Part 82]

**XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS**

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

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

## ATTACHMENT “B”: SPECIFIC CONDITIONS

### I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN

[ARS § 49-404.c and -426]

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

### II. CONDITIONS FOR COVERAGE

[A.A.C.R18-2-302.B, -306.01, -501 through -511]

This General Permit covers sources that meet the requirements as laid out in the general permit application for Air Curtain Incinerators.

### III. FACILITY-WIDE REQUIREMENTS

#### A. Opacity

##### 1. Instantaneous Surveys and Six-Minute Observations

###### a. Instantaneous Surveys

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

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

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

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

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

###### (2) EPA Reference Method 9 Certified Observer.

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

###### b. Six-Minute Observations

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

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

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

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

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

(2) EPA Reference Method 9.

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

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

2. Monitoring, Recordkeeping, and Reporting Requirements

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.

(1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.

(2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:

- (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
- (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
- (c) Report the event as an excess emission for opacity in accordance with Condition XI.A of Attachment "A".
- (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

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

**B. Reporting Requirements**

1. Deviations from the following Attachment “B” permit conditions shall be promptly reported in accordance with Condition XI.B.2 of Attachment “A”:

a. Condition VI.E

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

**C.** The Permittee shall maintain on-site, records of the manufacturer's specifications or Operation and Maintenance Plan for the air curtain incinerator.

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

**D.** The Permittee shall submit reports of all monitoring activities required in Attachment “B” along with the compliance certifications required by Section VII of Attachment “A”.

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

**E.** All requests, reports, applications, submittals, and other communications, required under Section IV of this Attachment, submitted to the Director pursuant to A.A.C. R18-2-901, -902, and 40 CFR Part 60 shall be submitted in duplicate to the EPA Region 9 office at the following address:

Director, Air Division  
U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105

[40 CFR 60.4(a)]

**F.** The Permittee shall operate and maintain all equipment associated with this General Permit in accordance with the manufacturer's specifications. If manufacturer specifications are not available, the Permittee shall develop and implement procedures for the proper operation and maintenance of each piece of equipment. A copy of the manufacturer specifications or the operation and maintenance plan shall be kept on site and made available to ADEQ or the respective air quality control agency upon request.

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

**G.** Notwithstanding any other provision of this permit, the Permittee shall not operate the air curtain incinerators on days when no-burn restrictions are in place or high pollution advisories have been issued.

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

**H.** From May 1 through September 30 each year, the Permittee shall not operate its air curtain incinerators in Area A as defined in Arizona Revised Statutes Section 49-541. This condition shall not apply if the products of combustion from the air curtain incinerator are released through a stack, chimney, or equivalent.

[A.R.S. 49-501.A.2 and A.R.S. 49-501.H]

**I.** The Permittee shall keep records of the operational location of the air curtain incinerators. The record shall document if the location is in an area that is deemed non-attainment for any applicable National Ambient Air Quality Standards (NAAQS) in 40 CFR 81.303. For each location, the Permittee shall keep a record of the duration of operation.

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

**J.** The Permittee shall not collocate the air curtain incinerator with any other facility that requires an air quality permit.

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

- K.** *Except as noted in Condition III.L below, the Permittee shall not cause the emissions of any criteria pollutant, from the air curtain incinerator, to exceed 225 tons per year in any rolling twelve month period.*

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

- L.** *While operating in portions of the state that are deemed non-attainment for any NAAQS in 40 CFR 81.303, the Permittee shall not cause the emissions of any criteria pollutant, from the air curtain incinerator, to exceed 90 tons per year in any rolling twelve month period.*

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

#### **IV. AIR CURTAIN INCINERATOR REQUIREMENTS**

##### **A. Applicability**

This Section is applicable to Air Curtain Incineration Units for which construction commenced after December 9, 2004, or for which modification or reconstruction is commenced on or after June 16, 2006, that burn wood waste, clean lumber and yard waste.

##### **B. Definitions**

[40 CFR 60.2977]

1. Air Curtain Incinerator – Equipment operated by forcefully projecting a curtain of air across an open, integrated combustion chamber (fire box) or open pit or trench (trench burner) in which combustion occurs.
2. Wood Waste - Untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:
  - a. Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands.
  - b. Construction, renovation, or demolition wastes.
  - c. Clean lumber.
  - d. Treated wood and treated wood products, including wood products that have been painted, pigment-stained, or pressure treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote, or manufactured wood products that contain adhesives or resins (e.g., plywood, particle board, flake board, and oriented strand board).
3. Yard Waste - Grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. Yard waste comes from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include:

- a. Construction, renovation, and demolition wastes.
  - b. Clean lumber.
4. Clean Lumber - Wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote, or manufactured wood products that contain adhesives or resins (e.g., plywood, particle board, flake board, and oriented strand board).
5. Institutional Facility - a landbased facility owned and/or operated by an organization having a governmental, educational, civic, or religious purpose such as a school, hospital, prison, military installation, church, or other similar establishment or facility.

C. Operational Requirements

1. Operating Limitations

- a. Except while used in an institutional facility, the Permittee shall not burn more than 35 tons per day of material listed below in IV.C.1.b(1) through IV.C.1.b(4) in the air curtain incinerator.

[40 CFR 60.2888(b), A.A.C. R18-2-306.01.A and A.A.C. R18-2-331.A.3.a]

[Material Permit conditions are indicated by underline and italics]

- b. The Permittee shall burn only the following materials in the air curtain incinerator:

(1) 100 percent wood waste.

(2) 100 percent clean lumber.

(3) 100 percent yard waste.

(4) 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

[40 CFR 60.2970(b), A.A.C. R18-2-306.01.A and A.A.C. R18-2-331.A.3.a ]

[Material Permit conditions are indicated by underline and italics]

2. Air Pollution Control Requirements

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the air curtain incinerator in a manner consistent with good air pollution control practice for minimizing emissions.

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

[Material Permit conditions are indicated by underline and italics]

3. General Operating Requirements

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



- a. The proper blower speed must be maintained so as to meet emissions standards.
- b. The blower must be operating when and as long as any material in the air curtain incinerator is burning.
- c. When loading (feeding) the air curtain incinerator, the material must not extend above the air curtain (blower airflow).
- d. Adequate measures must be taken to assure that no emissions emanate from materials left in the air curtain incinerator (i.e., overnight). For trench burners, all materials left in the trench must be extinguished.
- e. All materials removed from the air curtain incinerator must be completely extinguished and all reasonable precautions must be taken to control emissions.
- f. A visual on-site inspection of the air curtain incinerator and the material being loaded, must be conducted prior to start of burn. Any unauthorized material must be removed prior to burning.
- g. Materials, such as oleander leaves that generate toxic fumes when burned, shall not be burned in the air curtain incinerator.
- h. For trench operations, the burn pit must not exceed the length of the plenum.

4. Recordkeeping Requirements

- a. The Permittee shall maintain daily records of hours of operation including start and stop times, quantity and type of material burned in the air curtain incinerator, quantity and type of fuel burned, if any.  
[A.A.C. R18-2-306.A.3.c and -306.A.4]
- b. For air curtain incinerators located at institutional facilities, the Permittee shall maintain monthly and rolling 12-month totals of the amount of material burned.  
[A.A.C. R18-2-306.A.3.c and -306.A.4]
- c. For air curtain incinerators located at institutional facilities, the Permittee shall perform emission calculations at the end of each calendar month. The Permittee shall use the rolling 12-month total throughput to the unit and the following emission factors:
  - (1) PM10: 13.0 pounds per ton
  - (2) Carbon monoxide: 2.22 pounds per ton
  - (3) Nitrogen oxides: 4.0 pounds per ton
  - (4) Sulfur dioxide: 0.1 pounds per ton  
[A.A.C. R18-2-306.A.3.c and -306.A.4]

**D. Particulate Matter and Opacity**

1. Emission Limitations/Standards

Within 60 days after your air curtain incinerator reaches the charge rate at which it will operate, but no later than 180 days after the initial startup, the air curtain incinerator shall meet the following limitations. For existing incinerators, the Permittee shall meet the following limits upon obtaining coverage under the General Permit.

- a. *At all times, except during startup and malfunction, the opacity of emissions from the air curtain incinerator shall not be greater than 10% (6-minute average) measured in accordance with the Arizona Testing Manual, Reference Method 9.*

[40 CFR 60.2971(a)(1), 40 CFR 60.2971(b) and A.A.C. R18-2-331.A.3.f]  
[Material Permit conditions are indicated by underline and italics]

- b. *During the startup period that is within the first 30 minutes of operation, the opacity shall not exceed 35 percent (6-minute average).*

[40 CFR 60.2971(a)(2) and A.A.C. R18-2-331.A.3.f]  
[Material Permit conditions are indicated by underline and italics]

2. Monitoring, Recordkeeping, and Reporting Requirements

- a. Prior to commencing construction on the air curtain incinerator, the Permittee shall submit the following:

- (1) Notification of the intent to construct the air curtain incinerator.
- (2) Planned initial startup date.
- (3) Types of materials to be burned in the air curtain incinerator.

[40 CFR 60.2973(a)]

- b. A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the air curtain incinerator while in operation in accordance with Condition III.A.2 of Attachment "B".

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

- c. The Permittee shall keep records of results of all initial and annual opacity tests for at least 5 years, in either paper copy or computer-readable format that can be printed upon request, unless the Administrator approves another format. The records must be maintained on site for at least 2 years. All records shall be made available to the ADEQ Director and EPA Administrator upon request.

[40 CFR 60.2973(b), (c)]

- d. The Permittee shall submit the result of initial opacity tests no later than 60 days following the initial test. Subsequent annual test results shall be submitted within 12 months following the previous report. The Permittee may submit these reports as electronic or paper copy.

[40 CFR 60.2973(d), (e)]

- e. The Permittee shall keep a copy of the initial and annual reports on site for a period of 5 years. The Permittee must keep each report on site for at least 2 years. You may keep the reports of site for the remaining 3 years.

3. Testing Requirements

- a. For new sources:

Within 180 days of issuance of coverage under this general permit for air curtain incinerators, and annually thereafter, the Permittee shall conduct EPA Method 9 test for opacity.

[40 CFR 60.2972(a), (b), (c)]

- b. For existing sources:

If the air curtain incinerator has been out of operation for more than 12 months following the previous test, the Permittee shall perform the test upon the startup of the unit and annually thereafter.

[40 CFR 60.2972 (c), (d)]

**V. REQUIREMENTS FOR ENGINES NOT SUBJECT TO NSPS**

**A. Applicability**

This section applies to compression ignition internal combustion engines (ICE) in the equipment list

**B. Fuel Limitations**

- 1. The Permittee shall only fire diesel fuel in the internal combustion engines.

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

- 2. The diesel fuel shall not contain 0.90% or more by weight of sulfur.

[A.A.C. R18-2-701.20, 719.H]

- 3. Permit Shield

Compliance with the Conditions of this Subsection shall be deemed compliance with A.A.C. R18-2-719.H.

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

**C. Particulate Matter and Opacity**

- 1. Emission Limitations and Standards

- a. The Permittee shall not cause or allow to be discharged into the atmosphere from any engine particulate matter in excess of the amount calculated by the following equation:

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

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

Where:

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

Q = the heat input in million Btu per hour

- b. For the purposes of the calculations required in Condition V.C.1.a above, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The total heat input of all operating fuel-burning units at a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

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

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

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

## 2. Monitoring, Recordkeeping and Reporting Requirements

The Permittee shall conduct quarterly periodic opacity monitoring for the engines, when in operation, as per Condition III.A.2 of Attachment “B”.

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

## 3. Permit Shield

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

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

## D. Sulfur Dioxide

### 1. Emission Limitations and Standards

The Permittee shall not emit or cause to emit more than 1.0 pound of sulfur dioxide per million Btu heat input for any engine.

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

2. The Permittee shall comply with the emission standards in Condition V.D.1 by using ultra low sulfur diesel fuel.

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

### 3. Permit Shield

Compliance with the conditions of this Subsection shall be deemed compliance with A.A.C. R18-2-719.F.

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

## E. Hazardous Air Pollutants

### 1. General Requirements

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

[40 CFR 63.6605(b)]

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

[40 CFR 63.6625(h)]

- c. For emergency engines or engines less than 300 HP, the Permittee shall operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e)]

## 2. Requirements for Emergency engines

- a. The Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6603, 63.6625(i) and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (1) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

- (a) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
- (b) Viscosity: changed more than 20 percent from the viscosity of oil when new; and
- (c) Water Content: greater than 0.5 percent by volume.

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

part of the maintenance plan for the operation of the engine.

- (2) The Permittee shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
  - (3) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- b. If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Conditions V.E.2.a(1) through V.E.2.a(3), or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated.  
[40 CFR 63, Subpart ZZZZ, Table 2d]
- c. The Permittee shall operate the emergency engines according to the requirements in Conditions V.E.2.c(1) through V.E.2.c(3).  
[40 CFR 60.6640(f)]
- (1) There is no time limit on the use of emergency engine in emergency situations.
  - (2) The Permittee may operate the emergency engine for the purpose of maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.
  - (3) The Permittee may operate an emergency engine for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing.
- d. The Permittee shall install a non-resettable hour meter if one is not already installed.

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

[Material Permit Conditions are indicated by underline and italics]

### 3. Requirements for Non-emergency Engines less than 300 HP

- a. The Permittee shall comply with the following operation and maintenance requirements:

[40 CFR 63.6603(a), 63.6625(i) and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (1) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil. The Permittee shall at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

- (a) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
- (b) Viscosity: changed more than 20 percent from the viscosity of oil when new; and
- (c) Water Content: greater than 0.5 percent by volume.

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

- (2) The Permittee shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
- (3) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

- b. Continuous Compliance Requirements

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

[Table 6 to 40 CFR 63 Subpart ZZZZ]

#### 4. Requirements for Non-Emergency Engines >300 HP

a. Fuel Limitations

The Permittee shall use diesel fuel that meets the following requirements:

- (1) Sulfur content: 15 ppm maximum; and
  - (2) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent
- [40 CFR 63.6604(a) and 80.510(b)]

b. Emission Limitations

- (1) The Permittee shall comply with either of the following emission limitations in Condition V.E.4.b(1)(a) or V.E.4.b(1)(b):  
[40 CFR 63.6603(a), and 40 CFR 63, Subpart ZZZZ, Table 2d]

- (a) The Permittee shall limit concentration of CO in the engine exhaust to
  - (i) 49 ppmv at 15 percent O<sub>2</sub> for engines greater than 300 HP and less than or equal to 500 HP,
  - (ii) 23 ppmvd at 15 percent O<sub>2</sub> for engines greater than 500 HP;
- (b) The Permittee shall reduce CO emissions by 70%

c. Operation and Maintenance Requirements

- (1) The Permittee shall follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Director to approve different maintenance requirements that are as protective as manufacturer requirements.  
[40 CFR 63.6625(g)]

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

- (a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or  
[40 CFR 63.6625(g)(1)]

- (b) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.  
[40 CFR 63.6625(g)(2)]

d. Operating Limitations (only for Engines > 500 HP)

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





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

[40 CFR 63.6625(b) and A.A.C R18-2-331.A.3.c]  
[Material Permit Condition indicated by italics and underline]

f. Initial Performance Test/Compliance Demonstration

- (1) For CI Engines  $300 < \text{HP} \leq 500$

The Permittee shall conduct initial performance test to demonstrate that the average CO concentration, corrected to 15 percent O<sub>2</sub> on dry basis, from the 3 tests is less than or equal to CO emission limitation, or average reduction of emissions of CO is equal to or greater than the required CO percent reduction.

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

- (2) For CI Engines  $>500$  HP not equipped with CEMS,

The Permittee shall conduct initial performance test in accordance with the method in Table 4 of 40 CFR 63 Subpart ZZZZ to demonstrate compliance with the emission limits in Condition V.E.4.b.

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

(a) If the Permittee is using oxidation catalyst and CPMS, the Permittee shall record the catalyst pressure drop and catalyst inlet temperature during the initial performance test using the CPMS installed according to the requirements in 40 CFR 63.6625(b).

(b) If the Permittee is not using oxidation catalyst, the Permittee shall record the approved operating parameters (if any) using the CPMS installed according to the requirements in 40 CFR 63.6625(b).

- (3) For CI Engines  $>500$  HP equipped with CEMS,

The Permittee shall demonstrate initial compliance by

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

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

(b) Demonstrating that the average concentration of CO, or the average reduction of CO calculated using 40 CFR 63.6620 is less than or equal to the CO emission limitation. The initial test shall comprise the first 4-hour period after successful validation of the CEMS.

Compliance shall be based on the average concentration measured during the 4-hour period or, the average percent reduction achieved during the 4-hour period.

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

[40 CFR 63.6612(b)]

- (a) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
- (b) The test must not be older than 2 years.
- (c) The test must be reviewed and accepted by the Director.
- (d) Either no process or equipment changes must have been made since the test was performed, or the Permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

g. Continuous Compliance/Subsequent Performance Test Requirements (only for engines >500 HP and not using CEMS)

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

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

(2) For engines using oxidation catalyst,

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

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

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

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

- (c) If the Permittee changes the catalyst, the Permittee shall reestablish the values of the operating parameters

measured during the initial performance test. While reestablishing the values of the operating parameters, the Permittee shall also conduct a performance test to demonstrate that the Permittee is meeting the required emission limitation applicable to your stationary RICE.

[40 CFR 63.6640(b)]

- (3) For engines not using oxidation catalyst,

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

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

## 5. Recordkeeping Requirements

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

[40 CFR 63.6655(f)]

- b. For emergency engines, and engines less than or equal to 300 HP,

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

[40 CFR 63.6625(i)]

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

[40 CFR 63.6655(e)]

- c. For engines greater than 300 HP, the Permittee shall keep records described below:

[40 CFR 63.6655(a)]

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

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

- (3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
  - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition V.E.1.a including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- d. For engines > 500 HP and using CEMS or CPMS, the Permittee shall keep the following records for each CEMS or CPMS:
- [40 CFR 63.6655(b)]
- (1) Records described in 40 CFR 63.10(b)(2)(vi) through (xi).
  - (2) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
  - (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.
- e. The Permittee shall keep the records to show continuous compliance with each emission or operating limitation.
- [40 CFR 63.6655(d)]
- f. The Permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).
- [40 CFR 63.6660(a)-(c)]

## 6. Notification Requirements

- a. The Permittee shall submit all of the applicable notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) for engines greater than 100 HP.

[40 CFR 63.6645(a)(2) and (a)(5)]

- b. For engines required to conduct performance tests, the Permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. (For engines greater than 300 HP and not having CEMS)

[40 CFR 63.6645(g)]

- c. The Permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii) as below:

[40 CFR 63.6645(h)]

- (1) If the initial compliance demonstration included a performance test, the notification, including the performance test results, shall be submitted before the close of business on the 60th day following the completion of the performance test. (For engines greater than 300 HP and not having CEMS)
- (2) If the initial compliance demonstration does not include a performance test, the notification, shall be submitted before the close of business on the 60th day following the completion of the performance test. (For Engines greater than 500 HP and having CEMS)

7. Reporting Requirements (Only for CI Engines >300 HP)

- a. The Permittee shall submit semi-annual compliance in accordance with Section VII of Attachment A  
[40 CFR 63.6650(a) and (b), Table 7 to 40 CFR 63 Subpart ZZZZ]
- b. The Compliance report shall contain the following information  
[40 CFR 63.6650(c)]
  - (1) Company name and address;
  - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
  - (3) Date of report and beginning and ending dates of the reporting period;
  - (4) If the Permittee had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the Permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction;
  - (5) If there are no deviations from any applicable emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period; and
  - (6) If there were no periods during which the CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- c. For each deviation from an emission or operating limitation that occurs for an engine where the Permittee is not using a CMS to comply with the

operating limitations, the Compliance report shall contain the information in Conditions V.E.7.b(1) through V.E.7.b(4) above and the information below:

[40 CFR 63.6650(d)]

- (1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period;
- (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

d. For each deviation from an emission or operating limitation occurring for an engine where the Permittee is using a CMS to comply with the operating limitations, the Permittee shall include the following information:

[40 CFR 63.6650(e)]

- (1) The date and time that each malfunction started and stopped;
- (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks;
- (3) The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8);
- (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period;
- (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period;
- (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes;
- (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period;
- (8) An identification of each parameter and pollutant that was monitored at the stationary RICE;
- (9) A brief description of the stationary RICE;
- (10) A brief description of the CMS;
- (11) The date of the latest CMS certification or audit; and

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

8. Permit Shield

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

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

**VI. REQUIREMENTS FOR ENGINES SUBJECT TO NSPS SUBPART III**

**A. Applicability**

This Section applies to engines subject to 40 CFR 60 Subpart III

**B. Operating Requirements**

1. Emergency Engines

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

[40 CFR 60.4209(a), R18-2-306.A.3, -331.A.3.a]

[Material Permit Conditions are indicated by underline and italics]

- b. The Permittee shall operate stationary ICE according to the requirements in Conditions VII.A.5.c(2)(a) through (c) below. If the Permittee does not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

- (2) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by condition.

- (a) The Permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance



company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

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

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

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

(ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

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

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

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

of the engine owner or operator.

- c. *Operation of the CI ICE other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited.*

[40 CF 60.4211(f), R18-2-331.A.3.a]

[Material permit conditions are indicated by underline and italics]

- d. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4209(a), §60.4211(f), 40 CFR 60.4211(a) and 60.4206.

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

2. Non-Emergency

- a. The Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 kW (25 HP) and less than 56 kW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

[40 CFR 60.4208(c)]

- b. The Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 kW (75 HP) and less than 130 kW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

[40 CFR 60.4208(d)]

C. Fuel Requirements

1. Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

[40 CFR 60.4207(a)]

2. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[40 CFR 60.4207(b)]

3. Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).

[40 CFR 60.4207(d)]

4. Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

[40 CFR 60.4207(e)]

**D. Emission Limitations and Standards**

1. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[40 CFR 60.4206]

2. Emergency

- a. For pre-2007 model year

- (1) Engine with a displacement less than 10 liters per cylinder must comply with the emission standards in table 1.

- (2) Engine with displacement greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).

[40 CFR 60.4205(a)]

- b. 2007 and Later < 30 Liters

For 2007 and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

[40 CFR 60.4205(b)]

- c. Fire Pump Displacement < 30 Liters:

The Permittee operating fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emissions standards in Table 2 of this subsection, for all pollutants.

[40 CFR 60.4205(c)]

- d. Displacement  $\geq$  to 30 Liters:

[40 CFR 60.4205(d)]

The Permittee operating emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements below:

- (1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:

- (a) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is 130 rpm;

- (b)  $45 * n^{-0.2}$  g/KW-hr ( $34 * n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm where n is maximum engine speed; and

- (c) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:
  - (a) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
  - (b)  $44 * n^{-0.23}$  g/KW-hr ( $33 * n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
  - (c) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- e. Displacement < 30 Liters with Performance Test Requirements:  
 The Permittee operating emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4205(e)]

### 3. Non-Emergency

- a. For pre-2007 model year
  - (1) Engine with a displacement less than 10 liters per cylinder must comply with the emission standards in table 1.
  - (2) Engine with displacement greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).
- b. 2007 and Later < 30 Liters  
 For 2007 and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.
- c. Displacement ≥ to 30 Liters:  
 Engines with displacement greater than or equal to 30 liters per cylinder must meet the following requirements:

[40 CFR 60.4204(a)]

[40 CFR 60.4204(b)]

- (1) For engines installed prior to January 1, 2012, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:
  - (a) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);
  - (b)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
  - (c) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
  
- (2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:
  - (a) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
  - (b)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
  - (c) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
  
- (3) For engines installed on or after January 1, 2016, limit the emissions of NO<sub>x</sub> in the stationary CI internal combustion engine exhaust to the following:
  - (a) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
  - (b)  $9.0 \cdot n^{-0.20}$  g/KW-hr ( $6.7 \cdot n^{-0.20}$  g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and
  - (c) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.
  
- (4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).

[40 CFR 60.4204(c)]

e. Displacement < 30 Liters with Performance Test Requirements:

Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance

tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.

[40 CFR 60.4204(d)]

- f. Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must 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 I.A.1 thru I.A.4

[40 CFR 60.4204(e)]

- g. Owners and operators of stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with AECDs as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR 89.112 while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

[40 CFR 60.4204(f)]

**Table 1**

Emission Standards for Stationary Pre-2007 Model Year Engines with a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines > 2237 KW (3000 HP) and With a Displacement of <10 Liters per Cylinder

Engine Power	NMHC + NO <sub>x</sub>	HC	NO <sub>x</sub>	CO	VOC
	g/KW-hr (g/HP-hr)				
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)
37≤KW<56 (50≤HP<75)			9.2 (6.9)		
56≤KW<75 (75≤HP<100)			9.2 (6.9)		
75≤KW<130 (100≤HP<175)			9.2 (6.9)		
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
450≤KW<560 (600≤HP<750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)

**Table 2**

Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

Engine Power	Model Year(s)	NO <sub>x</sub> + NMHC	CO	PM
			g/KW-hr (g/HP-hr)	
KW<8 (HP<11)	20008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	20008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	20008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

**E. Air Pollution Control Requirements**

*If the engine is equipped with a diesel particulate filter, the Permittee shall install, operate and maintain the particulate filter in accordance with good air pollution control practices for minimizing emissions.*

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

**F. Compliance Requirements**

1. If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

- a. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- b. Change only those emission-related settings that are permitted by the manufacturer; and
- c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

[40 CFR 60.4211(a)]

2. Pre-2007 Model Year Engines

- a. The Permittee operating a pre-2007 model year stationary CI ICE or a CI fire pump manufactured prior to the model years in Table 3 of 40 CFR Part 60 Subpart IIII, shall demonstrate compliance according to one of the following methods:
  - (1) Purchasing an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
  - (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

- (3) Keeping records of engine manufacturer data indicating compliance with the standards.
- (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.

[40 CFR 60.4211 (b)]

3. 2007 and later Year Stationary CI ICE

The Permittee operating a 2007 model year and later stationary CI ICE or a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in Table 3 of 40 CFR Part 60, Subpart III, shall comply by purchasing an engine certified to the emission standards in §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications, except as permitted in Condition I.E.4.

[40 CFR 60.4211 (c)]

4. If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.

- a. Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.
- b. Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
  - (1) Identification of the specific parameters you propose to monitor continuously;
  - (2) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;
  - (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;



- (4) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
- (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- (6) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.

[40 CFR 60.4211(d)]

5. Modified or Reconstructed Stationary ICE

The Permittee operating a modified or reconstructed stationary CI ICE shall demonstrate compliance with the applicable standards using one of the following methods:

- a. Purchasing an engine certified to the emission standards in 60.4205(f).
- b. Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in 60.4212. The test shall be conducted within 60 days after the engine commences operation after the modification or reconstruction. The in-use performance tests shall meet the NTE standards as indicated in 40 CFR 60.4212.

[40 CFR 60.4205(e) and 4211(e)]

6. If the Permittee does not install, configure, operate, and maintain the CI ICE and control device according to the manufacturer's emission-related written instructions, or change the emission-related setting in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as following:

[40 CFR 60.4211(g)]

a. CI ICE less than 100 HP

The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

b. CI ICE greater than or equal to 100 HP and less than or equal to 500 HP

The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition,

the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after changing any non-permitted emission-related setting.

c. CI ICE greater than 500 HP

The Permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after changing any non-permitted emission-related setting on the engine. Subsequent tests shall be conducted every 8760 hours of engine operation or 3 years, whichever comes first.

**G. Monitoring and Recordkeeping**

1. Emergency

- a. Starting with the model years in Table 5 of 40 CFR Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

[40 CFR 60.4214(b)]

- b. The Permittee operating an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in I.C.2, the Permittee must submit an annual report according to the requirements in paragraphs I.G.3.a through I.G.3.c of this section.

(1) The report must contain the following information.

- (a) Company name and address where the engine is located.
- (b) Date of the report and beginning and ending dates of the reporting period.
- (c) Engine site rating and model year.
- (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (e) Hours operated for the purposes specified in I.C.2.b.(1) and (2) including the date, start time, and end time for engine operation for the purposes specified in I.C.2.b.(1) and (2).

- (f) Number of hours the engine is contractually obligated to be available for the purposes specified in I.C.2.
  - (g) Hours spent for operation for the purposes specified in I.C.2.b.(3), including the date, start time, and end time for engine operation for the purposes specified in I.C.b.(3). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
  - (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.4214 (d)]

## 2. Non-Emergency

- a. Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of F.1.a and F.1.b below:
  - (1) Submit an initial notification as required in §60.7(a)(1). The notification must include the information below:
    - (a) Name and address of the owner or operator;
    - (b) The address of the affected source;
    - (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
    - (d) Emission control equipment; and
    - (e) Fuel used.
  - (2) Keep records of the following information:
    - (a) All notifications submitted to comply with this subpart and all documentation supporting any notification.

- (b) Maintenance conducted on the engine.
- (c) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
- (d) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.

[40 CFR 60.4214(a)]

- 3. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

[40 CFR 60.4214(c)]

- 4. Owners or operators of stationary CI ICE equipped with AECDs pursuant to the requirements of 40 CFR 1039.665 must report the use of AECDs as required by 40 CFR 1039.665(e).

[40 CFR 60.4214(e)]

#### **H. Permit Shield**

Compliance with the terms of this Section shall be deemed compliance with 40 CFR 60.4201(a), 60.4204(a), 60.4204(b), 60.4205(a), 60.4205(b), 60.4205(c), 60.4206, 60.4207(b), 60.4208(c), 60.4208(d), 60.4209(a), 60.4209(b), 60.4211(a), 60.4211(b), and 60.4211(c), 60.4211(f), 60.4211(g)(1), 60.4211(b), and 60.4214(c).

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

### **VII. REQUIREMENTS FOR ENGINES SUBJECT TO 40 CFR 60 SUBPART JJJJ**

#### **A. Applicability**

This Section applies to the affected facilities as defined in 40 CFR 60.4230 and marked on the ATO as applicable to New Source Performance Standards (NSPS) Subpart JJJJ.

#### **B. Requirements**

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

#### **C. Permit Shield**

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60 Subpart JJJJ.

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

### **VIII. CONDITIONS SPECIFIC TO PORTABLE SOURCES**

- A.** 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. R18-2-503.E]

**B. Equipment Identification**

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

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

**C. Move Notice**

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;
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

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

**D. Renting or Leasing Permitted Equipment**

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

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

**E. Portable Sources Operating Solely in One County**

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.

**IX. FUGITIVE DUST REQUIREMENTS**

**A. Applicability**

Section 0 applies to any non-point source of fugitive dust in the facility.

**B. Particulate Matter and Opacity**

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

1. Emission Limitations and Standards

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

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

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

- (1) For a building or its appurtenances, or a building or subdivision site, or a driveway, or a parking area, or a vacant lot or sales lot, or an urban or suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, keep dust and other types of air contaminants to a minimum by good modern practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means;

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

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

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

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

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

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

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

- (5) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.  
[A.A.C. R18-2-606]
- (6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored to prevent excessive amounts of particulate matter from becoming airborne;  
[A.A.C. R18-2-607.A]
- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents to prevent excessive amounts of particulate matter from becoming airborne;  
[A.A.C. R18-2-607.B]
- (8) Operate mineral tailings piles by taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation or such other measures as are approved by the Director;  
[A.A.C R18-2-608]
- (9) Any other method as proposed by the Permittee and approved by the Director.  
[A.A.C. R18-2-306.A.3.c]

2. Air Pollution Control Requirements

Haul Roads and Storage Piles

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

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

[Material Permit Condition is indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition IX.B.1.b above were performed and the control measures that were adopted.  
[A.A.C. R18-2-306.A.3.c]

b. Opacity Monitoring Requirements

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

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

**C. Permit Shield**

Compliance with the conditions of Section 0 shall be deemed compliance with A.A.C. R18-2-604, -605, -606, 607, -608, -614, and -804.B.

**X. OTHER PERIODIC ACTIVITIES**

**A. Abrasive Blasting**

1. Particulate Matter and Opacity

a. Emission Limitations/Standards

(1) 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:

(2) Wet blasting;

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

(4) 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.

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

2. Monitoring and Recordkeeping Requirement

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

a. The date the project was conducted;

b. The duration of the project; and

c. Type of control measures employed.

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

3. Permit Shield

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

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

**B. Use of Paints**



1. Volatile Organic Compounds

a. Emission Limitations/Standards

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

(2) 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]

(3) The Permittee or their designated contractor shall not either:

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

(b) Thin or dilute any architectural coating with a photochemically reactive solvent.  
[A.A.C.R18-2-727.B]

(4) For the purposes of Condition X.B.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Condition X.B.1.a(3), or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

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

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

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.  
[A.A.C.R18-2-727.C]

(5) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition X.B.1.a(3), it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.  
[A.A.C.R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

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

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

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

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

c. Permit Shield

(1) Compliance with this Section shall be deemed compliance with A.A.C.R18-2-727.

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

2. Opacity

a. Emission Limitation/Standard

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

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

b. Permit Shield

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

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

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

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

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

2. Monitoring and Recordkeeping Requirement

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

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

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-1101.A.12.

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

## ATTACHMENT “C”: SPECIFIC CONDITIONS INSIDE MARICOPA COUNTY

### I. AIR CURTAIN INCINERATOR

#### A. Applicability

The provisions of this section are applicable to all Air Curtain Incinerators operated inside of Maricopa County.

[Rule 314 §304]

#### B. General Requirements

1. Prior to conducting an open outdoor fire in an air curtain destructor permittee shall obtain a site-specific burn plan. See the Appendix to Rule 314 of the Maricopa County Air Pollution Control Regulations for further requirements for the use of air curtain destructors. See Section 406 of Rule 314 of the Maricopa County Air Pollution Control Regulations for Burn Plan Applications and Conditions.

[Rule 314 §304]

2. While operating in Maricopa County, unless prohibited by Attachment “B” Condition III.H, the Permittee shall comply with the following hours of operation:

April-September: 6:00 am – 6:00 pm

October-March: 10:00 am – 5:00 pm

[Appendix to Maricopa County Rule 314, Part F]

3. Open outdoor fires cannot be conducted during any weekends or holidays except as provided in Sections 302.1(c), 303.1, 303.2(b), and 303.3 of Maricopa County Air Pollution Control Regulations Rule 314.

[Rule 314 §305.3]

4. Fire extinguishing equipment shall be available at all times during open outdoor fires.

[Rule 314 §305.4]

5. An attendant shall be present at all times during open outdoor fires for the duration of the burn.

[Rule 314 §305.5]

6. Open outdoor fires shall never be initiated with items that cause the production of black smoke.

[Rule 314 §305.6]

7. An air curtain destructor must be used for the burning of certain vegetative materials greater than 6 inches in diameter and an on-site inspection must be conducted before burning.

[Rule 314 §305.7]

8. The Permittee shall comply with the Appendix to Rule 314 of the Maricopa County Air Pollution Control Regulations

[Appendix to Maricopa County Rule 314, Part F]

## II. INTERNAL COMBUSTION ENGINES

### A. Applicability

1. This rule applies to a spark-ignition engine or compression-ignition engine including stationary RICE used in cogeneration, with a rated brake horsepower (rated bhp) of greater than 250. This rule also applies to a combination of stationary RICE each with a rated bhp greater than 50 used at a source, whose maximum aggregate rated bhp is greater than 250.

[Rule 324 §102.1]

2. A stationary RICE subject to this rule that is also subject to the federal standards of performance set forth in 40 CFR Part 60, Subpart IIII for compression-ignition engines or 40 CFR Part 60, Subpart JJJJ for spark-ignition engines shall comply with the most stringent requirements. Whenever more than one provision in this rule applies to such engine or whenever a provision in this rule and a provision in the federal standards apply to such engine, the provision or combination of provisions resulting in the lowest rate of emissions shall apply, unless otherwise specifically exempted or designated.

[Rule 324 §102.2]

### B. General Requirements

1. Good Combustion Practices/Tuning Procedure

[Rule 324 §302]

The Permittee shall conduct preventative maintenance or tuning procedures recommended by the engine manufacturer to ensure good combustion practices to minimize NO<sub>x</sub> emissions. A handheld monitor may be used if so desired by the Permittee for measurement of NO<sub>x</sub>, CO and concentrations in the effluent stream after each adjustment has been made to ensure NO<sub>x</sub> 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.

[Rule 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.

[Rule 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.

[Rule 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:

[Rule 324 §302.4]

- (1) Intake and exhaust valves
  - (2) Spark plugs (if so equipped)
  - (3) Spark timing and dwell or fuel injection timing (if adjustable), and
  - (4) Carburetor mixture (if adjustable)
- e. Spark Plugs and Ignition Points: Replace after 3,000 hours of operation or every year whichever occurs last.  
[Rule 324 §302.5]
- f. Coolant: Change after 3,000 hours of operation or every year whichever occurs last; and  
[Rule 324 §302.6]
- g. Exhaust System: Check for leaks and/or restrictions after 3,000 hours of operation or every year whichever occurs last.  
[Rule 324 §302.7]

2. Efficiency Allowance

[Rule 324 §305]

Each emission limitation expressed in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Regulations, 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:

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

Where energy input is determined by a fuel measuring device accurate to  $\pm 5\%$  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.

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

Where LHV = the lower heating value of the fuel

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

3. Equivalent or Identical Engine Replacement

[Rule 324 §306]

An equivalent replacement engine or an identical replacement engine shall be treated as the original stationary RICE that it replaces for the purposes of compliance with this rule

**C. Monitoring, Reporting and Recordkeeping**

[Rule 324 §502]

1. 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.  
[Rule 324 §502.1]
2. The Permittee shall keep monthly engine records for non-emergency engines or that include:
  - a. Hours of operation
  - b. Types of fuel used
  - c. Documentation verifying compliance with sulfur fuel content according to Section 301.1 of the Maricopa County Air Pollution Control Regulations.  
[Rule 324 §502.2]
3. The Permittee shall maintain an annual record of good combustion procedures for non-emergency engines.  
[Rule 324 §502.3]
4. The Permittee shall keep annual engine records for emergency engines or low usage non-emergency engines that include:
  - a. Monthly rolling twelve month total of hours of operation, including hours of operation for testing, reliability and maintenance
  - b. Fuel type and sulfur content of fuel; and
  - c. Explanation for the use of the engine if it is used as an emergency engine.  
[Rule 324 §502.4]

**D. Fuel Limitations**

The Permittee shall only burn the following fuel:

[Rule 324 §301]

- a. Use any fuel that contains no more than 0.0015% sulfur by weight, alone or in combination with other fuels.
- b. Use any waste derived fuel gas that contains no more than 0.08% sulfur by weight, alone or in combination with other fuels.

**E. Requirements for Opacity**

1. Emission Limitations/Standards

[Rule 324 §303]

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.

**F. Requirements for Nitrogen Oxides**

1. Emission Limitations/Standards

The Permittee shall comply with the emissions limits as described in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Requirements (shown below) based on the manufactured or modified date of the engine, and the Rated BHP.

[Rule 324 Tables 1 and 2]

2. Monitoring, Recordkeeping and Testing

[Rule 324 §501.b, 503]

The permittee shall demonstrate compliance with the emission limits above by either:

- a. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture; or
- b. Performance of emission testing using the test methods listed in Section 503 of Maricopa County Rule 324.

**G. Requirements for Carbon Monoxide**

1. Emission Limitations/Standards

The Permittee shall comply with the emissions limits as described in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Requirements (shown below) based on the manufactured or modified date of the engine, and the Rated BHP.

[Rule 324 Tables 1 and 2]

2. Monitoring, Recordkeeping and Testing

[Rule 324 §501.b, 503]

The permittee shall demonstrate compliance with the emission limits above by either:

- a. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture; or
- b. Performance of emission testing using the test methods listed in Section 503 of Maricopa County Rule 324.

**H. Requirements for Volatile Organic Compounds**



1. Emission Limitations/Standards

The Permittee shall comply with the emissions limits as described in Tables 1 and 2 of Rule 324 of the Maricopa County Air Pollution Control Requirements (shown below) based on the manufactured or modified date of the engine, and the Rated BHP.

[Rule 324 Tables 1 and 2]

2. Monitoring, Recordkeeping and Testing

[Rule 324 §501.b, 503]

The permittee shall demonstrate compliance with the emission limits above by either:

- a. A statement from the manufacturer that the engine meets the most stringent emissions standards found in 40 CFR Part 89 or 90 applicable to the engine and its model year at the time of manufacture; or
- b. Performance of emission testing using the test methods listed in Section 503 of Maricopa County Rule 324.

**Table 1 of Maricopa County Air Pollution Control Regulations Rule 324**

<b>MANUFACTURED OR MODIFIED</b>	<b>RATED BHP</b>	<b>ENGINE REQUIREMENTS</b>
Prior to October 22, 2003	250-399	770 ppmdv or 10 g/bhp-hr. NO <sub>x</sub> or turbocharger with aftercooler/intercooler or 4-degree injection timing retard
Prior to October 22, 2003	400 plus	550 ppmdv or 7.2 g/bhp-hr. NO <sub>x</sub> or turbocharger with aftercooler/intercooler or 4-degree injection timing retard
On or after October 22, 2003 but prior to July 11, 2005	>250	530 ppmdv or 6.9 g/bhp-hr. NO <sub>x</sub> or turbocharger with aftercooler/intercooler or 4-degree injection timing retard; 1,000 ppmdv CO; 0.40 g/bhp-hr PM

**Table 2 of Maricopa County Air Pollution Control Regulations Rule 324**

<b>MANUFACTURED OR MODIFIED</b>	<b>RATED BHP</b>	<b>OXIDES OF NITROGEN (NO<sub>x</sub>)</b>	<b>VOLATILE ORGANIC COMPOUND (VOC)</b>	<b>CARBON MONOXIDE (CO)</b>
<b>Lean-Burn Engines</b>				
Prior to October 22, 2003	>250	280 ppm <sub>dv</sub> or 4.0 g/bhp-hr	800 ppm <sub>dv</sub> or 5.0 g/bhp-hr	4,500 ppm <sub>dv</sub>
On or after October 22, 2003 but prior to June 12, 2006	>250	110 ppm <sub>dv</sub> or 1.5 g/bhp-hr	800 ppm <sub>dv</sub> or 5.0 g/bhp-hr	4,500 ppm <sub>dv</sub>
<b>Rich-Burn Engines</b>				
Prior to October 22, 2003	>250	280 ppm <sub>dv</sub> or 4.0 g/bhp-hr or three-way catalyst*	800 ppm <sub>dv</sub> or 5.0 g/bhp-hr or three-way catalyst*	4,500 ppm <sub>dv</sub> or three-way catalyst*
On or after October 22, 2003 but prior to June 12, 2006	>250	20 ppm <sub>dv</sub> or 0.3 g/bhp-hr or three-way catalyst*	800 ppm <sub>dv</sub> or 5.0 g/bhp-hr or three-way catalyst*	4,500 ppm <sub>dv</sub> or three-way catalyst*

\* The three-way catalyst shall provide a minimum of 80% control efficiency for NO<sub>x</sub> and CO for those engines fueled with natural gas, propane or gasoline. In addition, the three-way catalyst shall also provide a minimum of at least 50% control efficiency for VOC for those engines fueled by gasoline.

## ATTACHMENT "D": SPECIFIC CONDITIONS INSIDE PINAL COUNTY

### I. AIR CURTAIN INCINERATORS OPERATED INSIDE PINAL COUNTY

#### A. Applicability

1. The provisions of this section are applicable to all air curtain incinerators operated inside Pinal County if the products of combustion are released through a stack, chimney, or equivalent.
2. Whenever more than one Condition in this Attachment regulating the same emissions applies to any emissions unit, or whenever a Condition in this Attachment and a Condition in Attachment "B" regulating the same emissions applies to any emissions unit, the Condition or combination of Conditions resulting in the lowest emissions rate or lowest concentration of regulated air pollutants released to the atmosphere shall apply, unless otherwise specifically exempted or designated in the applicable permit Conditions.

[A.R.S. § 49-402(D)]

#### B. Operating Limitations

Air curtain incinerators shall not be used within 500 feet of the nearest dwelling.

[Rule 5-3-100-C]

#### C. Requirements for Particulate Matter

##### 1. Emissions Limitations/Standards

- a. The Permittee shall not emit in any one hour particulate matter in excess of 0.1 grains per cubic foot based on dry flue gas at standard conditions corrected to 12 percent carbon dioxide.

[Rule 5-3-100-B-1]

- b. The Permittee shall be exempted from the above standard in the following circumstances:

- (1) For a period once each day for the purpose of building a new fire but not to exceed 60 minutes

[Rule 5-3-100-D-2-a]

- (2) For an upset of operations not to exceed three minutes in any 60 minute period.

[Rule 5-3-100-D-2-b]

##### 2. Test Procedures

- a. The Permittee shall use the test methods in 40 CFR 60, Appendix A to demonstrate compliance with the emission standards in Section I.C as follows:

- (1) Method 5 for the concentration of particulate matter and the associated moisture content. The sampling time for each run shall

be at least 60 minutes and the minimum sample volume shall be 30.0 dry standard cubic feet, except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the Director.

[Rule 5-3-100-F-1-a and Rule 5-3-100-F-2]

- (2) Method 1 for sample and velocity traverses [Rule 5-3-100-F-1-b]
- (3) Method 2 for velocity and volumetric flow rate [Rule 5-3-100-F-1-c]
- (4) Method 3 for gas analysis and calculation of excess air, using the integrated sampling technique [Rule 5-3-100-F-1-d]

## ATTACHMENT “E”: SPECIFIC CONDITIONS INSIDE PIMA COUNTY

### I. AIR CURTAIN INCINERATORS OPERATED INSIDE PIMA COUNTY

#### A. Applicability

1. The provisions of this section are applicable to all air curtain incinerators operated inside of Pima County.

Pima County DEQ Contact Information:

Address: PDEQ 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701

Phone: (520) 724-7400

E-mail: [Air.Permits@pima.gov](mailto:Air.Permits@pima.gov).

[PDEQ Website](#)

2. Pursuant to Attachment “B” Condition III.L, the following township/range/section coordinates are designated nonattainment areas for PM<sub>10</sub> in Pima County:

1. Rillito nonattainment area: T11S-R9E to R12E; T12S-R8E to R12E;

2. Ajo nonattainment area: T12S-R6W

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

[A.R.S. § 49-402(D)]

#### B. Operating Limitations

1. Prior to conducting an open outdoor fire in an air curtain incinerator (destructor), the Permittee shall obtain an open burn permit from the Control Officer or a delegated authority at the address in Condition I.A of this Attachment “E”.

[P.C.C. 17.14.080.D.1.h]

2. Air curtain incinerators shall not be operated within 500 feet of the nearest dwelling and at least 50 feet from any structure.

[P.C.C. 17.14.080.D.3.k & PCC 17.16.170.D]

3. Unless equipped pursuant to Condition I.B.4 of this Attachment “E” or unless otherwise prohibited in this permit, air curtain incinerators shall only be operated during the following hours:

- a. Year Round: No earlier than 1 hour after sunrise; and

- b. Year Round: No later than 2 hours before sunset.

[PCC 17.14.080.D.3.c]

4. Air curtain incinerators that release products of combustion through a stack, chimney, or equivalent and equipped with a continuous monitoring and recording opacity meter meeting the requirements of Performance Specification 1, Appendix B of 40 CFR Part 60 shall not be limited in their hours of operation, provided records are maintained of the continuous opacity monitoring pursuant to Attachment “A” Condition XII.
5. Pursuant to Attachment “B” Condition III.G, air curtain incinerators shall not operate when an air stagnation advisory has been issued by the National Weather Service in effect in the area or during periods when smoke can be expected to accumulate to the extent that it will significantly impair visibility in Class I areas.

[PCC 17.14.080.D.3.m]

6. Air curtain incinerators that are relocated or authorized for operation in the Rillito or Ajo nonattainment areas or within 10 kilometers of a Class I area shall comply with the following requirements:

- a. Air curtain incinerators shall comply with the annual limits in Attachment “B” Condition III.L of this permit.

- b. At least 10 days prior to the relocation of a portable or temporary air curtain incinerator, the Permittee shall provide reasonable notice to the Control Officer of the probable duration of operation at the authorized location in addition to the move notice required by Attachment “B” Condition XIII.C of this permit. This information shall be sent via E-mail to [Air.Permits@pima.gov](mailto:Air.Permits@pima.gov).

[PCC 17.16.590.E]

- c. A portable or temporary air curtain incinerator covered by this permit and authorized or relocated within 10 miles of a Class I area shall be limited in its operation at that location to a period not to exceed 2 years. Such time period shall not be renewable. For such sources intending to operate as a stationary source, the Permittee must submit an application for an individual permit pursuant to PCC 17.12.010 and Attachment “B” Condition XVIII.E.

[PCC 17.08.150.F.3 & 5]

### C. Requirements for Particulate Matter

#### 1. Emissions Limitations/Standards

If the products of combustion from an air curtain incinerator covered by this permit are released through a stack, chimney, or equivalent the following shall apply:

- a. The Permittee shall not emit in any one hour particulate matter in excess of 0.08 grains per cubic foot based on dry flue gas at standard conditions corrected to 12 percent carbon dioxide.

[P.C.C. 17.16.170.C.1]

The Control Officer shall not require the Permittee to conduct a performance test to demonstrate compliance with this condition unless Control Officer has reason to believe conditions exist which have a potential to cause a violation of the standard.

b. The Permittee shall be exempted from the above standard in the following circumstances:

(1) For a period once each day for the purpose of building a new fire but not to exceed 60 minutes

[P.C.C. 17.16.170.E.1.a]

(2) For an upset of operations not to exceed three minutes in any 60 minute period.

[P.C.C. 17.16.170.E.1.b]

## 2. Test Procedures

c. When required by the Control Officer, the Permittee shall use the test methods in 40 CFR 60, Appendix A to demonstrate compliance with the emission standards in Section I.C as follows:

(1) Method 4 and Method 5 for the concentration of particulate matter and the associated moisture content. The sampling time for each run shall be at least 60 minutes and the minimum sample volume shall be 30.0 dry standard cubic feet, except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the Director.

[P.C.C. 17.16.170.G.1.a and P.C.C. 17.16.170.G.2]

(2) Method 1 for sample and velocity traverses

[P.C.C. 17.16.170.G.1.b]

(3) Method 2 for velocity and volumetric flow rate

[P.C.C. 17.16.170.G.1.c]

(4) Method 3 for gas analysis and calculation of excess air, using the integrated sampling technique

[P.C.C. 17.16.170.G.1.d]

## II. OPACITY & VISIBILITY REQUIREMENTS FOR SOURCES INSIDE PIMA COUNTY

### A. Applicability

Except for open fires permitted pursuant to PCC 17.14.080 including permitted outdoor fires using an air curtain incinerator (destructor), the requirements of this section shall apply to all sources of air contaminants operating in Pima County including fugitive dust.

[PCC 17.16.050.C & PCC 17.16.010.A]

1. For the purpose of this section, **nonpoint source** means any source of air contaminants which due to a lack of an identifiable emission point or plume cannot be considered a point source, including fugitive dust producing activities.

**B. Emissions Limitations/Standards**

1. 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 nonpoint source, as measured in accordance with condition III.A of this permit, shall not exceed the following:

[PCC 17.16.050.B.2]

- a. 20% for such nonpoint sources in eastern Pima County, east of the eastern boundary of the Tohono O’Odham Reservation.
- b. 40% for such nonpoint sources in all other areas of Pima County.  
**[Federally Enforceable When Opacity Is Above 40%]**

2. The average optical density of plumes and effluents from a single point, multiple emission point, or fugitive emission source in Pima County, measured pursuant to Condition III.A of Attachment “B” shall not exceed 20% opacity.

[PCC 17.16.040 & PCC 17.16.130.B.1]

3. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

[PCC 17.16.050.D]

- a. This paragraph shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.
- b. This paragraph shall not apply to the generation of airborne particulate matter from undisturbed land.