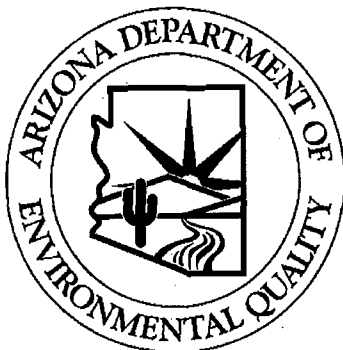


ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
1110 West Washington Street • Phoenix, AZ 85007 • Phone: (602) 771-2338

AIR QUALITY CONTROL GENERAL PERMIT for BOILERS

(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" and "B"

ADEQ GENERAL PERMIT NUMBER 105 PERMIT CLASS II EXPIRATION DATE March 23, 2020

PERMIT ISSUED THIS 23rd DAY OF March, 2015

SIGNATURE

Eric C. Massey, Director, Air Quality Division

TITLE

AIR QUALITY CONTROL GENERAL PERMIT FOR BOILERS

INTRODUCTION

This general permit covers stationary facilities that are subject to federal New Source Performance Standards (NSPS) or state regulations. This general permit does not apply to Class I sources and does not cover sources located within Maricopa, Pima, or Pinal County.

Owners/operators of boiler facilities with maximum firing capacities of less than or equal to 100 million British Thermal Units per hour (MMBtu/hr) may obtain coverage under this General Permit in lieu of an individual permit. Such parties shall do so by obtaining an ‘Authorization to Operate’ (ATO) for each boiler and emergency internal combustion engine, which will attest to their formal agreement to abide by all conditions contained herein. Permittees covered under this General Permit may operate each boiler and emergency internal combustion engine up to the maximum number of hours per year listed in the ATO.

References in this General Permit to the “Director” mean the Director of the Arizona Department of Environmental Quality, references to the “Department” mean the Arizona Department of Environmental Quality (ADEQ) and references to the “Administrator” mean the Administrator of the United States Environmental Protection Agency (U.S. EPA).

TABLE OF CONTENTS

INTRODUCTION	2
ATTACHMENT “A”: GENERAL PROVISIONS	4
I. GENERAL PERMIT EXPIRATION AND RENEWAL	4
II. COMPLIANCE WITH PERMIT CONDITIONS	4
III. GENERAL PERMIT REOPENINGS, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE	4
IV. POSTING OF GENERAL PERMIT	5
V. FEE PAYMENT	6
VII. COMPLIANCE CERTIFICATION	6
VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS	7
IX. INSPECTION AND ENTRY	7
X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD.....	7
XI. ACCIDENTAL RELEASE PROGRAM.....	7
XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING	7
XIII. RECORD KEEPING REQUIREMENTS	12
XIV. REPORTING REQUIREMENTS	13
XV. DUTY TO PROVIDE INFORMATION.....	13
XVI. PERMIT COVERAGE AMENDMENTS OR REVISIONS.....	13
XVII. FACILITY CHANGE ALLOWED WITHOUT OBTAINING AN ATO OR INDIVIDUAL PERMIT.....	13
XVIII. TESTING REQUIREMENTS.....	16
XIX. PROPERTY RIGHTS.....	17
XX. SEVERABILITY CLAUSE	17
XXI. PERMIT SHIELD.....	17
XXII. PROTECTION OF STRATOSPHERIC OZONE	18
XXIII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS	18
ATTACHMENT “B”: SPECIFIC CONDITIONS	19
I. FACILITY-WIDE REQUIREMENTS.....	19
II. BOILERS NOT SUBJECT TO NEW SOURCE PERFORMANCE STANDARDS	20
III. BOILERS SUBJECT TO NEW SOURCE PERFORMANCE STANDARDS (NSPS)	25
IV. EMERGENCY INTERNAL COMBUSTION ENGINE(S).....	26
V. UNCLASSIFIED SOURCES	58
VI. FUGITIVE DUST REQUIREMENTS.....	61
VII. OTHER PERIODIC ACTIVITIES.....	63

**AIR QUALITY CONTROL GENERAL PERMIT
FOR BOILERS**

ATTACHMENT “A”: GENERAL PROVISIONS

I. GENERAL PERMIT EXPIRATION AND RENEWAL

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

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

II. COMPLIANCE WITH PERMIT CONDITIONS

- A. The Permittee shall comply with all conditions of this General Permit including all applicable requirements of the air quality rules under Title 18, Chapter 2 of the Arizona Administrative Code. Any noncompliance is grounds for enforcement action, for ATO termination or revocation, or for denial of a renewal application. In addition, non-compliance with any federally enforceable requirements constitutes a violation of the Clean Air Act.

[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 General Permit.

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

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

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

[A.A.C. R18-2-510.A.1]
 - 2. The Director has determined that the terms and conditions of this General Permit no longer meet the requirements of A.R.S. §49-426 and 427.

[A.A.C. R18-2-510.A.2]
 - 3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions

standards or other terms or conditions of the permit.

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

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

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

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

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

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

1. The source is not in compliance with the terms and conditions of this General Permit;
2. The Director has determined that the emissions from the source or facility class are significant contributors to ambient air quality standard violations which are not adequately addressed by the requirements in this General Permit.
3. The Director has information which indicates that the effects on human health and the environment from the sources covered under this General Permit are unacceptable;
4. The Director has reasonable cause to believe that the ATO was obtained by fraud or misrepresentation; or
5. The person applying for an ATO failed to disclose a material fact required by the permit application or the regulations applicable to the ATO of which the applicant had or should have had knowledge at the time the application was submitted.

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

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

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

IV. POSTING OF GENERAL PERMIT

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

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

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

V. FEE PAYMENT

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

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

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emissions information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

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

VII. COMPLIANCE CERTIFICATION

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

- A. The Permittee shall submit a compliance certification to the Director annually which describes the compliance status of the source with respect to each General Permit condition. The Permittee shall list on the compliance certification all items of equipment issued ATO(s), on site at the time of annual certification. This certification shall be submitted no later than January 31st of each year and shall report the compliance status of the source during the previous calendar year.
- B. The compliance certification shall include the following:
 - 1. Identification of each term or condition of the permit that is the basis of the certification.
 - 2. Identification of the method or other means used by the Permittee for determining the compliance status with each term and condition during the certification period.
 - 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Condition VII.B.2 above. The certification shall identify each deviation and take it into account for consideration in the compliance certification.
 - 4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this attachment.
 - 5. Other facts the Director may require to determine the compliance status of the source.

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

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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

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

IX. INSPECTION AND ENTRY

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

Upon presentation of credentials, the Permittee shall allow the Director or an 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 this General Permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of this General Permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this General Permit;
- D. Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the General Permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If a source which has been granted coverage under this permit becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, reapply for coverage under the General Permit demonstrating how the source will comply with the standard.

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

XI. ACCIDENTAL RELEASE PROGRAM

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

[40 CFR 68]

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

- A. Excess Emissions Reporting

[A.A.C. R18-2-306.A.5.b, -306.E.3.d and -310]

- 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 XII.A.1.b below.
 - (2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a(1) above
 - b. The report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred;
 - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - (3) Date, time and duration, or expected duration, of the excess emissions;
 - (4) Identity of the equipment from which the excess emissions emanated;
 - (5) Nature and cause of such emissions;
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and
 - (7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.
2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.

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

B. Permit Deviations Reporting

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such

deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the Permittee first learned of the occurrence of a deviation from a permit requirement.

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

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.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was being properly operated at the time;
 - c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

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)(5)]

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

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

1. Applicability

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

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

2. Affirmative Defense for Malfunctions

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

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

- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
- h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
- i. All emissions monitoring systems were kept in operation if at all practicable; and
- j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in Condition XII.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:
 - (1) The excess emissions could not have been prevented through careful and prudent planning and design;
 - (2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - (3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - (4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - (6) During the period of excess emissions there were no

exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

- (7) All emissions monitoring systems were kept in operation if at all practicable; and
- (8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

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

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

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

5. Demonstration of Reasonable and Practicable Measures

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

XIII. RECORD KEEPING REQUIREMENTS

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

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

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

C. All required records shall be maintained either in an unchangeable electronic format or in

a handwritten logbook utilizing indelible ink.

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

XIV. REPORTING REQUIREMENTS

The Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII of Attachment "A".
- B. Excess emission, permit deviation, and emergency reports in accordance with Section XII of Attachment "A".
- C. Performance test results in accordance with Condition XVIII.G of Attachment "A".
- D. Other reports required by any condition in Attachment "B".

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

XV. DUTY TO PROVIDE INFORMATION

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the General Permit coverage, or to determine compliance with this General Permit. Upon request, the Permittee shall also furnish to the Director copies of records that the Permittee is required to keep under the General Permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Director along with a claim of confidentiality.

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

- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in a General Permit coverage application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

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

XVI. PERMIT COVERAGE AMENDMENTS OR REVISIONS

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

The Permittee shall apply for revised General Permit coverage, or for an individual permit, for changes to the facility which do not qualify for a facility change without revision as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318); or
- B. Subsequent ATOs (see Section XVII below).

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

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

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

- A. Except for a physical change or change in the method of operation at a Class II source subject to logging or notice requirements in Conditions XVII.B and XVII.C below, a

change at a Class II source shall not be subject to revision, notice, or logging requirements under this Section.

B. Except as otherwise provided in the conditions applicable to an emissions cap created under R18-2-306.02, the following changes may be made if the source keeps on site records of the changes according to Subsection I:

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

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

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

months beginning with commencement of construction; and

6. A change that will result in the emissions of a new regulated air pollutant above an applicable regulatory threshold but that does not trigger a new applicable requirement for that category: 30 days. For purposes of this requirement, an applicable regulatory threshold for a conventional air pollutant shall be 10% of the applicable major source threshold for that pollutant.

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

1. When the proposed change will occur,
2. A description of the change,
3. Any change in emissions of regulated air pollutants, and
4. Any permit term or condition that is no longer applicable as a result of the change.

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

F. Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, constitutes a change under A.A.C. R18-2-317.01.A.

G. If a source change is described under both Conditions XVII.B and XVII.C above, the source shall comply with Condition XVII.C above. If a source change is described under both Condition XVII.C above and A.A.C. R18-2-317.01.B, the source shall comply with A.A.C. R18-2-317.01.B.

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

I. Logging Requirements

1. Each log entry required by a change under A.A.C. R18-2-317.02.B shall include at least the following information:
 - a. A description of the change, including:
 - (1) A description of any process change.
 - (2) A description of any equipment change, which does not require a

new or revised ATO(s), including both old and new equipment descriptions, model numbers and serial numbers, or any other unique equipment number.

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

XVIII. TESTING REQUIREMENTS

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

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

B. Operational Conditions During Testing

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

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

D. Test Plan

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

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

E. Stack Sampling Facilities

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

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

F. Interpretation of Final Results

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

G. Report of Final Results

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

XIX. PROPERTY RIGHTS

This General Permit does not convey any property rights of any sort, or any exclusive privilege.
[A.A.C. R18-2-306.A.8.d]

XX. SEVERABILITY CLAUSE

The provisions of this General Permit are severable. In the event of a challenge to any portion of this General Permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.
[A.A.C. R18-2-306.A.7]

XXI. PERMIT SHIELD

As of the date an ATO for a source is granted, compliance with the conditions of this General Permit shall be deemed compliance with all applicable requirements in effect on the date of

General Permit issuance, provided that such applicable requirements are included and expressly identified in this permit. The permit shield shall not apply to any changes made pursuant to Section XVII of this Attachment.

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

XXII. 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]

XXIII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS

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

[40 CFR Part 60, 63]

**AIR QUALITY CONTROL GENERAL PERMIT
FOR BOILERS**

ATTACHMENT “B”: SPECIFIC CONDITIONS

I. FACILITY-WIDE REQUIREMENTS

- A.** This General Permit does not cover sources located within Maricopa, Pima or Pinal Counties. [A.A.C. R18-2-306.A.2]
- B.** This General Permit does not authorize the operation of oil or diesel fired boilers that are individually greater than or equal to 10 MMBtu/hr. [A.A.C. R18-2-306.A.2]
- C.** This General Permit does not cover non-emergency engines. [A.A.C. R18-2-306.A.2]
- D.** Within 30 days of obtaining coverage under this general permit, the Permittee shall have on-site or on-call a person certified in EPA Reference Method 9 unless all Method 9 observations or instantaneous visual observations required by this permit are conducted as Alternative Method-082 (Digital Camera Operating Technique). The Permittee shall certify the camera and the associated software in accordance with ALT-082 procedures. Any Method 9 test or instantaneous visual survey required by this permit can be conducted as ALT-082. The results of a Method 9 observation or any individual instantaneous visual observation conducted as ALT-082 shall be obtained within 30 minutes of completing the Method 9 observation or individual instantaneous visual observation [A.A.C. R18-2-306.A.3.c]
- E.** All boiler stacks shall be designed in such a way that they are above the buildings in the vicinity, are capable of discharging vertically and there are no obstructions to gas flow such as rain caps, except for hinged rain caps. [A.A.C. R18-2-306.A.2]
- F.** The Permittee shall operate all equipment in accordance with vendor-supplied operations and maintenance instructions. If vendor-supplied operations and maintenance instructions are not available, the Permittee shall prepare an Operations and Maintenance Plan which provides adequate information to properly operate and maintain the equipment in good working order. In the absence of vendor supplied operations and maintenance instructions, the Permittee shall operate the equipment in accordance with this Operation and Maintenance Plan. The Permittee shall keep a log of all activities conducted pursuant to the vendor supplied instructions or the Operation and Maintenance Plan. [A.A.C.R18-2-306.A.3]
- G.** All records, analyses, and reports shall be retained for a minimum of five years from the date of generation. The most recent two years of data shall be kept on-site. [A.A.C.R18-2-306.A.4]
- H.** 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]
- I.** *The Permittee shall not operate any boiler, in any rolling 12-month period, for more than*

the maximum hours listed in the ATO.

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

[Material permit conditions are indicated by underline and italics]

- J.** For each boiler that is limited to operate less than 8,760 hours per year as noted on the ATO, the Permittee shall maintain a log of actual hours of operation of each boiler. At the end of each calendar month, the Permittee shall calculate the rolling total hours of operation for each boiler for the previous 12 month period.

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

- K.** 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.

II. BOILERS NOT SUBJECT TO NEW SOURCE PERFORMANCE STANDARDS (NON-NSPS BOILERS)

A. Applicability

This Section is applicable to any boiler marked as not applicable to NSPS on the ATO and with a maximum firing capacity of 100 MMBtu per hour or less that is not covered by Section III of this Attachment.

[A.A.C. R18-2-302.B and -724.A]

B. Fuel Limitation

The Permittee shall only burn natural gas, liquefied petroleum gas (Butane or Propane), or diesel fuel in the boiler(s).

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

[Material permit conditions are indicated by underline and italics]

C. Particulate Matter

1. Emission Limitation

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

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

where:

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

Q = the heat input in million Btu per hour.

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

2. Permit Shield

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

D. Opacity Standards

1. Emission Limitations and Standards

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

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

2. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee shall conduct a monthly EPA Reference Method 22 survey of visible emissions emanating from the stack of the boiler(s). If the opacity of the emissions observed appears to exceed the standard, the Permittee shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial Method 22 survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date & time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 15%, the Permittee shall report this to ADEQ as an excess emission and initiate appropriate corrective action to reduce the opacity below 15%. The Permittee shall keep a record of the corrective action performed.

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

3. Permit Shield

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

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

E. Sulfur Dioxide

1. Emissions Limitation

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

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

2. Monitoring, Reporting and Record Keeping

The Permittee shall keep records of fuel supplier certifications or other appropriate documentation to demonstrate compliance with the sulfur content limit specified in the Condition II.E.1 above. The certification shall contain the information with regard to sulfur content and the method used to determine the sulfur content of fuel. These records shall be made available to ADEQ upon request.

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

3. Permit Shield

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

F. Hazardous Air Pollutants

1. Applicability

- a. The requirements of this part are applicable to oil-fired boilers that are identified as applicable to NESHAP Subpart JJJJJ on the respective ATO.
- b. For purposes of this Part, a new boiler is one which commenced construction or reconstruction after June 4, 2010.
- c. For purposes of this Part, an existing boiler is one which commenced construction or reconstruction on or before June 4, 2010.

2. Operating Requirements

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

[40 CFR 63.11205(a)]

b. Work-Practice Standard

[40 CFR 63.11201(b)]

(1) Existing Boiler

(a) Initial Boiler Tune-up

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

[40 CFR 63.11214(b)]

(b) Subsequent Boiler Tune-ups

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

[40 CFR 63.11223(b)]

- (ii) Subsequent tune-ups for boilers less than or equal to 5 MMBtu/hr shall be conducted every 5 years. Each 5 year tune-up shall be conducted

no more than 61 months after the previous tune-up.

[40 CFR 63.11223(e)]

(2) New Boiler

(a) Initial Boiler Tune-up

- (i) The Permittee operating a new boiler with a heat input rate greater than 5 MMBtu/hr shall conduct an initial boiler tune-up according to the procedures stated in Condition II.F.2.c no later than 25 months after the initial startup.

[40 CFR 63.11223(e)]

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

[40 CFR 63.11223(e)]

(b) Subsequent Boiler Tune-ups

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

[40 CFR 63.11223(b)]

c. Tune-up Procedures

[40 CFR 63.11223(b)]

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

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (this may be delayed until the next scheduled unit shutdown, but the burner must be inspected at least once every 36 months).
- (2) Inspects the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
- (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.

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

3. Notification, Reporting and Recordkeeping Requirements

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

Administrator or Director, a biennial report containing the following information about the tune-ups.

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

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

4. Permit Shield

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

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

III. BOILERS SUBJECT TO NEW SOURCE PERFORMANCE STANDARDS (NSPS)

A. Applicability

1. This Section is applicable to Boilers marked as applicable to NSPS on the respective ATO. NSPS Boilers are those with maximum firing capacities between 10 and 100 MMBtu/hr and commenced construction, modification, or reconstruction after June 9, 1989.

[40 C.F.R. 60.40c(a)]

2. The requirements of Section II of this Attachment are not applicable to boilers covered under Section III.

B. Fuel Limitations

1. Type of Fuel

The Permittee shall only burn natural gas or liquefied petroleum gas in the boiler(s), as specified in the ATO.

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

[Material permit conditions are indicated by underline and italics]

2. Monitoring & Recordkeeping

[40 C.F.R. 60.48c(g)(1), 40 C.F.R. 60.48c(g)(2), and 40 C.F.R. 60.48c(g)(3)]

The Permittee shall record the amount of fuel combusted during each day for each boiler. While combusting diesel, the Permittee may elect to record the amount of fuel combusted during each month for each boiler by providing a fuel certification with the following information:

- a. The name of the fuel supplier;
- b. A statement from the fuel supplier that the fuel complies with the specifications under the definition of distillate oil in §60.41c; and
- c. The sulfur content or maximum sulfur content of the fuel.

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.48c(g).

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

4. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 C.F.R. 60.42c(d), 60.42c(g), 60.44c(h), 60.48c(d), 60.48c(e)(11), 60.48c(f)(1) and 60.48c(j).

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

C. New Source Reporting

- 1. The Permittee shall provide the following notifications to ADEQ for all boilers subject to construction, reconstruction or modification, as those terms are defined in 40 C.F.R. Sections 60.2, 60.14 and 60.15, during the term of this permit:

[40 C.F.R. 60.7(a) and 60.48c(a)]

- a. Design heat input of the boiler, identification of fuels to be combusted in the boiler(s), the annual capacity factor at which the Permittee anticipates operating the boiler(s) based on all fuels fired and based on each individual fuel fired.
- b. Date of construction commencement – postmarked no later than 30 days after such date.
- c. Date of anticipated start-up – postmarked not more than 60 days or less than 30 days prior to such date.
- d. Date of actual start-up – postmarked within 15 days after such date.

IV. EMERGENCY INTERNAL COMBUSTION ENGINE(S)

A. Fuel Limitations

- 1. *The Permittee shall only burn gasoline, natural gas, liquefied petroleum gas, or diesel fuel in the emergency engine(s).*

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

[Material permit conditions are indicated by underline and italics]

- 2. The Permittee shall maintain copies of fuel supplier certifications which verify that the sulfur content of the fuel is less than the applicable limit specified in this Section.

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

B. Compression Ignition Engines Subject To NSPS Subpart III

1. Applicability

This Section applies to compression ignition engines marked as subject to NSPS Subpart III on the associated ATO.

[40 CFR 60.4200(a)]

- a. Compression ignition (CI) internal combustion engines (ICE) that commenced construction after July 11, 2005, where the stationary CI ICE are:

[40 CFR 60.4200(a)(2)]

- (1) Manufactured after April 1, 2006, and are not fire pump engines, or

[40 CFR 60.4200(a)(2)(i)]

- (2) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

[40 CFR 60.4200(a)(2)(ii)]

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

[40 CFR 60.4200(a)(3)]

2. General Requirements

a. Operating Requirements

- (1) The Permittee shall operate and maintain the engine according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. A copy of the instructions or procedures shall be kept onsite and made available to ADEQ upon request.

[40 CFR 60.4211(a) and A.A.C. R18-2-306.A.3]

- (2) The Permittee shall only change those engine settings that are permitted by the manufacturer.

[40 CFR 60.4211(a)]

- (3) The Permittee shall meet the requirements of 40 CFR Parts 89, 94, or 1068, as they apply.

[40 CFR 60.4211(a)]

- (4) The Permittee shall operate and maintain the internal combustion engine according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer over the entire life of the engine.

[40 CFR 60.4206]

b. Fuel Requirements

- (1) An engine that uses diesel fuel and has a displacement of less than 30 liters per cylinder, shall use diesel fuel that meets the following requirements of 40 CFR 80.510(b):

- (a) Sulfur content: 15 ppm maximum; and
 - (b) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
- [40 CFR 60.4207(b)]

c. Additional Emergency Engine Requirements

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

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

- (2) The Permittee shall operate the emergency stationary ICE according to Condition IV.B.2.c(2)(a) through Condition IV.B.2.c(2)(c). In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.

[40 CFR 60.4211(f)]

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

[40 CFR 60.4211(f)(1)]

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

[40 CFR 60.4211(f)(2)]

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

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

- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in

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

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

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

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

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

[40 CFR 60.4211(f)(3)]

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

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

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

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

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

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

- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission

or local standards or guidelines.
[40 CFR 60.4211(f)(3)(i)(C)]

(d) The power is provided only to the facility itself or to support the local transmission and distribution system.
[40 CFR 60.4211(f)(3)(i)(E)]

(e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
[40 CFR 60.4211(f)(3)(i)(D)]

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

[40 CFR 60.4211(g)]

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

[40 CFR 60.4211(g)(1)]

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

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

[40 CFR 60.4211(g)(2)]

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

[40 CFR 60.4211(g)(3)]

3. Emission Limitations and Standards

a. Fire Pump Engines

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

[40 CFR 60.4205(c)]

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

100 ≤ EP < 175	2009 and earlier	0.60	7.8	3.7
	2010 and later	0.22	3.0	N/A
175 ≤ EP < 300	2008 and earlier	0.40	7.8	2.6
	2009 and later	0.15	3.0	N/A
300 ≤ EP < 600	2008 and earlier	0.40	7.8	2.6
	2009 and later	0.15	3.0	N/A
600 ≤ EP ≤ 750	2008 and earlier	0.40	7.8	2.6
	2009 and later	0.15	3.0	N/A
EP > 750	2007 and earlier	0.40	7.8	2.6
	2008 and later	0.15	4.8	N/A

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

[Note 1 to Table 4 to 40 CFR Subpart III]

- (2) For model years 2010 through 2012, fire pump engines that are greater than 100 horsepower, but less than 175 horsepower with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

[Note 2 to Table 4 to 40 CFR Subpart III]

b. Emergency Engines

- (1) Pre-2007 model year emergency stationary internal combustion engines with:

[40 CFR 60.4205(a)]

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

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

EP > 750		1.0	6.9	8.5	0.40
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[40 CFR 94.8(a)(1)(iii)]

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

[40 CFR 60.4205(b)]

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

[40 CFR 60.4202(a)]

1. For engines with a maximum engine power less than 50 horsepower:

[40 CFR 60.4202(a)(1)]

- (a) 2007 model year engines shall meet the emission standards for new nonroad compression ignition engines in 40 CFR 89.112 and 40 CFR 89.113, for all pollutants, for the same model year and maximum engine power, and

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

2. For engines with a maximum engine power greater than or equal to 50 horsepower, the Permittee shall meet the emission standards for new nonroad compression ignition engines in 40 CFR 89.112 and 40 CFR 89.113, for all pollutants, for the same model year and maximum engine power.

[40 CFR 60.4202(a)(2)]

- (3) 2007 model year and later engines shall meet the emission standards for new marine compression ignition engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.

[40 CFR 60.4202(e)]

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

[40 CFR 60.4205(e)]

d. Modified or Reconstructed Emergency CI ICE

Any modified or reconstructed emergency stationary internal combustion engine shall meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed internal combustion engine that are specified in Condition IV.B.3.

[40 CFR 60.4205(f)]

4. Compliance Determinations

a. General Requirements

The Permittee shall operate and maintain the control device according to the manufacturer's written instructions or procedures that are developed by the Permittee and approved by the engine manufacturer. A copy of the instructions or procedures shall be kept on-site and made available to ADEQ upon request.

[40 CFR 60.4211(a) and A.A.C. R18-2-306.A.3]

b. Pre-2007 CI ICE

The Permittee of a pre-2007 model year stationary compression ignition internal combustion engine that is required to comply with the emission standards specified in Condition IV.B.3.b(1), shall demonstrate compliance according to one of the methods specified below:

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

[40 CFR 60.4211(b)]

c. 2007 and Later CI ICE

For 2007 model year and later internal combustion engines that are required to comply with the emission standards specified in Condition IV.B.3.b(2), the Permittee shall comply by purchasing an engine certified to the emission standards in Condition IV.B.3.b(2), as applicable, for the

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

[40 CFR 4211(c)]

d. 2007 and Later Fire Pump Engines

The Permittee of a 2007 model year and later stationary fire pump engines that is manufactured during or after the model year that applies to the fire pump engine power (EP) rating in the following table and that are required to comply with the emission standards specified in Condition IV.B.3.b(1) shall comply by purchasing an engine certified to the emission standards in Condition IV.B.3.b(1) as applicable, for the same model year and National Fire Protection Association (NFPA) nameplate engine power. The engine shall be installed and configured according to the manufacturer's specifications.

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

[40 CFR 4211(c)]

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

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

5. Monitoring, Recordkeeping, and Reporting Requirements

- a. If the Permittee elects to meet the emission limitations contained in Condition IV.B.3, the Permittee shall maintain records, including manufacturer specifications, demonstrating that the engine meets the horsepower and RPM specifications.

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

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

[40 CFR 60.4214(a)]

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

[40 CFR 60.4214(a)(1)]

- (a) Name and address of the Permittee;

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

- (b) The address of the affected source;

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

- (c) Engine information including make, model, engine family, serial number, model year, maximum engine

- power, and engine displacement; [40 CFR 60.4214(a)(1)(iii)]
 - (d) Emission control equipment; and [40 CFR 60.4214(a)(1)(iv)]
 - (e) Fuel used. [40 CFR 60.4214(a)(1)(v)]
- (2) Keep records of the information the following: [40 CFR 60.4214(a)(2)]
- (i) All notifications submitted to comply with this subpart and all documentation supporting any notification. [40 CFR 60.4214(a)(2)(i)]
 - (ii) Maintenance conducted on the engine. [40 CFR 60.4214(a)(2)(ii)]
 - (iii) If the stationary CI internal combustion engine is certified, documentation from the manufacturer that the engine is certified to meet the emission standards. [40 CFR 60.4214(a)(2)(iii)]
 - (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards. [40 CFR 60.4214(a)(2)(iv)]
- c. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the Permittee is not required to submit an initial notification. Starting with the model years in the table below, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- d. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the Permittee shall keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]
- e. For an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Condition IV.B.2.c(2)(b)(ii) and Condition IV.B.2.c(2)(b)(iii) or that operates for the purposes specified in Condition IV.B.2.c(2)(c)(i), the Permittee shall submit an annual report according to the requirements below:

- (1) The report shall contain the following information:

[40 CFR 60.4214(d)(1)]

 - (a) Company name and address where the engine is located.

[40 CFR 60.4214(d)(1)(i)]
 - (b) Date of the report and beginning and ending dates of the reporting period.

[40 CFR 60.4214(d)(1)(ii)]
 - (c) Engine site rating and model year.

[40 CFR 60.4214(d)(1)(iii)]
 - (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

[40 CFR 60.4214(d)(1)(iv)]
 - (e) Hours operated for the purposes specified in Condition IV.B.2.c(2)(b)(ii) and Condition IV.B.2.c(2)(b)(iii), including the date, start time, and end time for engine operation for the purposes specified in Condition IV.B.2.c(2)(b)(ii) and Condition IV.B.2.c(2)(b)(iii).

[40 CFR 60.4214(d)(1)(v)]
 - (f) Number of hours the engine is contractually obligated to be available for the purposes specified in Condition IV.B.2.c(2)(b)(ii) or Condition IV.B.2.c(2)(b)(iii).

[40 CFR 60.4214(d)(1)(vi)]
 - (g) Hours spent for operation for the purposes specified in Condition IV.B.2.c(2)(c), including the date, start time, and end time for engine operation for the purposes specified in Condition IV.B.2.c(2)(c). The report shall also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

[40 CFR 60.4214(d)(1)(vii)]
- (2) The first annual report shall cover the calendar year 2015 and shall be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year shall be submitted no later than March 31 of the following calendar year.

[40 CFR 60.4214(d)(2)]
- (3) The annual report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to 40 CFR Part 60, Subpart IIII is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.4214(d)(3)]

- f. The Permittee shall maintain monthly records of engine operation. The records shall include the purpose of operation and the duration of time the engine was operated. The record shall identify whenever the operation of the engine was for emergency purposes.

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

6. Testing Requirements

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

[40 CFR 60.4212]

7. Permit Shield

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

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

C. Spark-Ignition Engines Subject To NSPS Subpart JJJJ

1. Applicability

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

2. Fuel Requirements

a. Gasoline Fuel Sulfur Limits

If the Permittee burns gasoline in the stationary emergency SI ICE, then that gasoline shall meet the per gallon sulfur limit of 80 parts per million (ppm) as stated in 40 CFR 80.195.

[40 CFR 60.4235]

b. Permit Shield

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

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

3. Operating Requirements

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

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

[Material Permit Conditions are indicated by underline and italics]

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

[A.A.C. R18-2-306.A.3, A.A.C. R18-2-331.A.3.c, and 40 CFR 60.4237]
[Material Permit Conditions are indicated by underline and italics]

- c. The Permittee shall operate the stationary emergency SI ICE according to the requirements in Conditions IV.C.3.c(1) through IV.C.3.c(3) below.
[40 CFR 60.4243(d)]

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

[40 CFR 60.4243(d)(1)]

- (2) The Permittee may operate the stationary emergency SI ICE for any combination of the purposes specified in Conditions IV.C.3.c(2)(a) through IV.C.3.c(2)(c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition IV.C.3.c(2) below counts as part of the 100 hours per calendar year allowed by this paragraph.

[40 CFR 60.4243(d)(2)]

- (a) Emergency stationary SI ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator or Director 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 SI ICE beyond the 100 hours per calendar year.

[40 CFR 60.4243(d)(2)(i)]

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

[40 CFR 60.4243(d)(2)(ii)]

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

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

[40 CFR 60.4243(d)(3)]

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

[40 CFR 60.4243(d)(3)(i)]

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

[40 CFR 60.4243(d)(3)(i)(A)]

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

[40 CFR 60.4243(d)(3)(i)(B)]

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

[40 CFR 60.4243(d)(3)(i)(C)]

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

[40 CFR 60.4243(d)(3)(i)(D)]

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

d. The Permittee operating an emergency stationary natural gas fired SI ICE may operate the engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the Permittee shall conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233.
[40 CFR 60.4243(e)]

e. The Permittee shall use air-to-fuel ratio controllers when operating a three-way catalysts/non-selective catalytic reduction. The air-to-fuel ratio controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
[40 CFR 60.4243(g)]

f. **Permit Shield**

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4237, 60.4243(d), 60.4243(e), and 60.4243(g).
[A.A.C. R18-2-325]

4. Emission Standards

a. The Permittee shall operate and maintain the stationary emergency SI ICE such that it complies with the emission standards listed in Condition IV.C.4.b below over the entire life of the engine.
[40 CFR 60.4234]

b. The Permittee operating a stationary emergency SI ICE that commenced construction (date engine was ordered) or modified or reconstructed after June 12, 2006, and was manufactured on or after the date specified in the Table below shall comply with the emission standards listed in the corresponding applicable standards.
[40 CFR 60.4233(d) and (f)]

Engine Rating	Manufacture Date	Applicable Regulation	
< 25 HP	On or After July 1, 2008	40 CFR 60.4231(a) [40 CFR 60.4233(a)]	
> 25 HP	On or After January 1, 2009	Gasoline Engines 40 CFR 60.4231(b) [40 CFR 60.4233(b)]	Rich Burn LPG Engines 40 CFR 60.4231(c) [40 CFR 60.4233(c)]

Engine Rating	Manufacture Date	Applicable Regulation		
> 25 HP (excluding gasoline & rich burn LPG ICE)	On or After January 1, 2009	Emission Standards in Table 1 of 40 CFR Part 60 Subpart JJJ [40 CFR 60.4233(d) and (e)]		
≥25 HP and <130 HP which are Modified or Reconstructed After June 12, 2006	On or After January 1, 2009	Emission Standards in Table 1 of 40 CFR Part 60 Subpart JJJ [40 CFR 60.4233(d) and (e)]		
≥130 HP which are Modified or Reconstructed After June 12, 2006	Prior to January 1, 2009	<u>NO_x</u> 3.0 g/HP-hour or 250 ppmvd @ 15% O ₂ [40 CF60.4233(f)]	<u>CO</u> 4.0 g/HP-hr or 540 ppmvd @ 15% O ₂ [40 CF60.4233(f)]	<u>VOC</u> 1.0 g/HP-hr or 86 ppmvd @ 15% O ₂ [40 CF60.4233(f)]

c. Permit Shield

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

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

5. Compliance Requirements

a. Emergency SI ICE Less Than 25 HP

(1) Certified SI ICE

The Permittee operating a stationary SI ICE manufactured after July 1, 2008 and subject to the emission standards specified in 40 CFR 60.4233(a), shall demonstrate compliance by purchasing an engine certified to the emission standards in 40 CFR 60.4231(a). In addition, the Permittee shall meet one of the requirements specified below:

[40 CFR 60.4243(a)]

(a) Operating per Manufacturer's Instructions

The Permittee shall operate and maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions and shall keep records of conducted maintenance to

demonstrate compliance. If engine settings are adjusted according to and consistent with the manufacturer's instructions, the stationary SI ICE will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

(b) Not Operating per Manufacturer's Instructions

If the Permittee does not operate and maintain the certified stationary SI ICE and control device in accordance with the manufacturer's emission-related written instructions, then the SI ICE will be considered a non-certified engine. The Permittee shall demonstrate compliance by keeping a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 60.4243(a)(2)(i)]

(2) Non-Certified SI ICE

The Permittee operating a non-certified stationary SI ICE shall perform an initial performance test per the testing requirements of 40 CFR 60.4244. If the stationary engine is rebuilt or undergoes major repair or maintenance, subsequent performance testing is required every 8,760 hours or 3 years, whichever comes first. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(f)]

b. Emergency SI ICE Greater Than 25 HP (Gasoline Engines and Rich Burn LPG Engines)

(1) Certified SI ICE

The Permittee operating a stationary SI ICE manufactured after July 1, 2008 and subject to the emission standards specified in 40 CFR 60.4233(b) or (c), shall demonstrate compliance by purchasing an engine certified to the emission standards in 40 CFR 60.4231(b) or (c), as applicable, for the same engine class and maximum engine power. In addition, the Permittee shall meet one of the requirements specified below:

[40 CFR 60.4243(h)]

(a) Operating per Manufacturer's Instructions

The Permittee shall operate and maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions and shall keep records of conducted maintenance to demonstrate compliance. If engine settings are adjusted according to and consistent with the manufacturer's

instructions, the stationary SI ICE will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

(b) Not Operating per Manufacturer's Instructions

If the Permittee does not operate and maintain the certified stationary SI ICE and control device in accordance with the manufacturer's emission-related written instructions, then the SI ICE will be considered a non-certified engine. The Permittee shall demonstrate compliance according to the following:

[40 CFR 60.4243(a)(2)]

(i) SI ICE Less Than 100 HP (<100 HP)

The Permittee operating a stationary SI ICE less than 100 HP shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 60.4243(a)(2)(i)]

(ii) SI ICE Greater Than or Equal to 100 HP and Less Than or Equal to 500 HP (Between 100 HP and 500 HP)

The Permittee operating a stationary SI ICE greater than or equal to 100 HP and less than or equal to 500 HP, shall keep maintenance records of the conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test per the testing requirements of 40 CFR 60.4244 within 1 year of engine startup to demonstrate compliance. If the stationary engine is rebuilt or undergoes major repair or maintenance, subsequent performance testing is required every 8,760 hours or 3 years, whichever comes first. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(a)(2)(ii) and (f)]

(iii) SI ICE Greater Than 500 HP (>500 HP)

The Permittee operating a stationary SI ICE greater than 500 HP, shall keep a maintenance plan and records of conducted maintenance and

shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40 CFR 60.4243(a)(2)(iii)]

(2) Non-Certified SI ICE

(a) SI ICE Less Than or Equal to 500 HP (<500 HP)

The Permittee operating a non-certified stationary SI ICE that is less than or equal to 500 HP, shall perform an initial performance test per the testing requirements of 40 CFR 60.4244. If the stationary engine is rebuilt or undergoes major repair or maintenance, subsequent performance testing is required every 8,760 hours or 3 years, whichever comes first. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(f)]

c. Emergency SI ICE Greater Than 25 HP (Excluding Gasoline and Rich Burn LPG Engines)

(1) Certified SI ICE

The Permittee operating a stationary SI ICE greater than 25 HP subject to the emission standards specified in 40 CFR 60.4233(d) or (e), shall demonstrate compliance according to one of the methods specified below:

[40 CFR 60.4243(b)]

(a) Operating per Manufacturer's Instructions

The Permittee shall operate and maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions and shall keep records of conducted maintenance to demonstrate compliance. If engine settings are adjusted according to and consistent with the manufacturer's instructions, the stationary SI ICE will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

(b) Not Operating per Manufacturer's Instructions

If the Permittee does not operate and maintain the certified stationary SI ICE and control device in accordance with the manufacturer's emission-related

written instructions, then the SI ICE will be considered a non-certified engine and the Permittee shall demonstrate compliance according to the following:

[40 CFR 60.4243(a)(2)]

(i) SI ICE Less Than 100 HP (<100 HP)

The Permittee operating a stationary SI ICE less than 100 HP shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR 60.4243(a)(2)(i)]

(ii) SI ICE Greater than 100 HP and Less Than or Equal to 500 HP (Between 100 HP and 500 HP)

The Permittee operating a stationary SI ICE greater than or equal to 100 HP and less than or equal to 500 HP, shall keep maintenance records of the conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test per the testing requirements of 40 CFR 60.4244 within 1 year of engine startup to demonstrate compliance. If the stationary engine is rebuilt or undergoes major repair or maintenance, subsequent performance testing is required every 8,760 hours or 3 years, whichever comes first. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(a)(2)(ii) and (f)]

(iii) SI ICE Greater than 500 HP (>500 HP)

The Permittee operating a stationary SI ICE greater than 500 HP, shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(2) Non-Certified SI ICE

If the Permittee operates a non-certified engine, compliance with the emission standards specified in 40 CFR 60.4233(d) or (e) shall be demonstrated according to the testing requirements specified in 40 CFR 60.4244 and according to the following:

[40 CFR 60.4243(b)(2)]

(a) SI ICE Greater Than 25 HP and Less Than or Equal to 500 HP (Between 25 HP and 500 HP)

The Permittee operating a stationary SI ICE greater than 25 HP and less than or equal to 500 HP, shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test per the testing requirements of 40 CFR 60.4244. If the stationary engine is rebuilt or undergoes major repair or maintenance, subsequent performance testing is required every 8,760 hours or 3 years, whichever comes first. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).

[40 CFR 60.4243(b)(2)(i) and (f)]

(b) SI ICE Greater Than 500 HP (>500 HP)

The Permittee operating a certified stationary SI ICE greater than 500 HP, shall keep a maintenance plan and records of the conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40 CFR 60.4243(b)(2)(ii)]

d. Modified or Reconstructed Emergency SI ICE

- (1) The Permittee operating a stationary SI ICE that is modified or reconstructed and complying with the emission standards specified in 40 CFR 60.4233(f), shall demonstrate compliance in accordance with Condition IV.C.5.d(1)(a) or IV.C.5.d(1)(b) below. Any non-certified engine that demonstrates compliance with Condition IV.C.5.a(1)(a) below demonstrates that the non-certified engine complies with the emission standards specified in 40 CFR 60.4233(f).

- (a) SI ICE Greater Than 25 HP and Less Than or Equal to 500 HP (>25 HP and < 500 HP)

The Permittee operating a stationary SI ICE greater than 25 HP and less than or equal to 500 HP, shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test according to the testing requirements specified in 40 CFR 60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.

[40 CFR 60.4243(b)(2)(i) and 40 CFR 60.4243(i)(2)]

- (b) SI ICE Greater Than 500 HP (> 500 HP)

The Permittee operating a stationary SI ICE greater than 500 HP, shall keep a maintenance plan and records of the conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test according to the testing requirements specified in 40 CFR 60.4244. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction. In addition, the Permittee shall conduct subsequent performance testing every 8,760 or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40 CFR 60.4243(b)(2)(ii) and 40 CFR 60.4243(i)(2)]

e. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4243(a), 60.4243(b), 60.4243(c), 60.4243(f), 60.4243(h), and 60.4243(i).

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

6. Recordkeeping and Reporting Requirements

- a. The Permittee operating an emergency stationary SI ICE must meet the following recordkeeping requirements:

[40 CFR 60.4245(a)]

- (1) Records of all notifications submitted to comply with this Section and all documentation supporting any notification.

[40 CFR 60.4245(a)(1)]

- (2) Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]
- (3) If the stationary SI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable. [40 CFR 60.4245(a)(3)]
- (4) If the stationary SI ICE is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]
- b. For all emergency stationary SI ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. [40 CFR 60.4245(b)]
- c. For all emergency stationary SI ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. [40 CFR 60.4245(b)]
- d. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)]
- e. The Permittee operating a stationary SI ICE greater than or equal to 500 HP that has not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the following information: [40 CFR 60.4245(c)]
- (1) Name and address of the Permittee; [40 CFR 60.4245(c)(1)]
- (2) The address of the affected source; [40 CFR 60.4245(c)(2)]
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; [40 CFR 60.4245(c)(3)]

- (4) Emission control equipment; and [40 CFR 60.4245(e)(4)]
- (5) Fuel used. [40 CFR 60.4245(e)(5)]

f. 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 Condition IV.C.3.c(2)(b) and Condition IV.C.3.c(2)(c), shall submit an annual report according to the requirements in Condition IV.C.6.f(1) through Condition IV.C.6.f(3) below:

[40 CFR 60.4245(e)]

- (1) The report must contain the following information.
 - (a) Company name and address where the engine is located; [40 CFR 60.4245(e)(1)(i)]
 - (b) Date of the report and beginning and ending dates of the reporting period; [40 CFR 60.4245(e)(1)(ii)]
 - (c) Engine site rating and model year; [40 CFR 60.4245(e)(1)(iii)]
 - (d) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place; [40 CFR 60.4245(e)(1)(iv)]
 - (e) Hours operated for the purposes specified in Condition IV.C.3.c(2)(b) and Condition IV.C.3.c(2)(c) including the date, start time, and end time for engine operation for the purposes specified in Condition IV.C.3.c(2)(b) and Condition IV.C.3.c(2)(c); [40 CFR 60.4245(e)(1)(v)]
 - (f) Number of hours the engine is contractually obligated to be available for the purposes specified in Condition IV.C.3.c(2)(b) and Condition IV.C.3.c(2)(c); and [40 CFR 60.4245(e)(1)(vi)]
 - (g) Hours operated for the purposes specified in Condition IV.C.3.c(1), including the date, start time, and end time for engine operation for the purposes specified in Condition IV.C.3.c(1). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [40 CFR 60.4245(e)(1)(vii)]
- (2) The first annual report shall cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later

than March 31 of the following calendar year.

[40 CFR 60.4245(e)(2)]

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

[40 CFR 60.4245(e)(3)]

g. Permit Shield

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

D. Emergency Generators Not Subject to NSPS

1. Applicability

This Section applies to internal combustion engines marked as not subject to NSPS on the associated ATO.

2. Particulate Matter and Opacity

a. Emission Limitations and Standards

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

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

where:

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

Q = the heat input in million Btu per hour.

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

- (2) For the purposes of the calculations required in Condition IV.D.2.a(1) 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]

- (3) Opacity

- (a) The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40% opacity.
- (b) Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.
[A.A.C. R18-2-719.E]

b. Monitoring and Recordkeeping

- (1) A certified EPA Reference Method 9 observer shall conduct a monthly survey, of visible emissions emanating from the stack of the generator(s). If the opacity of the emissions observed appears to exceed the standard, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the initial survey and any EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date & time of observation, and the results of the observation. If the observation shows a Method 9 opacity reading in excess of 40%, the Permittee shall report this to the Director as an excess emission in accordance with Condition XII.A.1 of Attachment "A" and initiate appropriate corrective action to reduce the opacity below 40%. The Permittee shall keep a record of the corrective action performed.
[A.A.C. R18-2-306.A.3.c]
- (2) The Permittee shall keep records of fuel supplier certifications. The certification shall contain information regarding the name of fuel supplier and lower heating value of the fuel. These records shall be made available to ADEQ upon request.
[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-719.B, -719.C.1, and -719.E.
[A.A.C. R18-2-325]

3. Sulfur Dioxide

a. Emission Limitations and Standards

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

b. Monitoring, Recordkeeping, and Reporting

- (1) The Permittee shall keep daily records of the sulfur content and lower heating value of the fuel being fired in the generator(s). The Permittee shall keep records of fuel supplier certifications to demonstrate compliance with the sulfur content limit specified in Condition IV.D.3.a(2). The certification shall contain the sulfur content of the fuel and the method used to determine the sulfur content of the fuel. These records shall be made available to ADEQ upon request.

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

- (2) The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8%.

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

c. Permit Shield

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

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

4. Hazardous Air Pollutants

a. Applicability

The requirements of this Section are applicable to any emergency generator on the ATO marked as applicable to 40 CFR 63 Subpart ZZZZ.

[40 CFR 63.6580 and 40 CFR 63.6590]

b. Operating Requirements

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

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

- (a) The Permittee shall change the oil and filter every 500 hours operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described below shall be completed. The oil analysis must be performed at the same frequency specified for changing the oil.

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

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

- (a) Total Acid Number: increased by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of oil when new;

- (b) Viscosity: changed more than 20 percent from the viscosity of oil when new;
 - (c) Water Content: greater than 0.5 percent by volume.
 - (ii) If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the above limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis or before commencing operation, whichever is later. Records must be kept of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the operation of the engine.
- (b) For emergency CI engines the Permittee shall inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63, Subpart ZZZZ, Table 2d]
- (c) For emergency SI engines the Permittee shall inspect the spark plugs every 1000 hours of operation or annually, whichever come first, and replace as necessary.
[40 CFR 63, Subpart ZZZZ, Table 2d]
- (d) The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63, Subpart ZZZZ, Table 2d]
- (2) If the emergency generator is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Conditions IV.D.4.b(1)(a) through IV.D.4.b(1)(d), 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]
- (3) At all times, The Permittee shall operate and maintain the emergency generator, including associated air pollution control equipment and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce

emissions if levels as required by 40 CFR Part 63, Subpart ZZZZ have been achieved.

[40 CFR 63.6605(b)]

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

[40 CFR 63.6625(e)]

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

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

[Material Permit Conditions are indicated by underline and italics]

- (6) The Permittee shall operate the emergency engines according to the requirements in Conditions IV.D.4.b(6)(a) through IV.D.4.b(6)(c) below. In order for the engines to be considered emergency stationary ICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance response, and operation in non-emergency situations for 50 hours per year, as described in these Conditions, is prohibited. If the emergency engine is not operated in accordance with the requirements in Conditions IV.D.4.b(6)(a) through IV.D.4.b(6)(c) below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

[40 CFR 63.6640(f)]

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

[40 CFR 63.6640(f)(1)]

- (b) The Permittee may operate the emergency generator for any combination of the purposes specified in Conditions IV.D.4.b(6)(b)(i) through IV.D.4.b(6)(b)(iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition IV.D.4.b(6)(c) counts as part of the 100 hours per calendar year allowed by this Condition.

[40 CFR 63.6640(f)(2)]

- (i) The engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission operator, or the insurance company associated with the engine. The Permittee may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not

required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the engine beyond the 100 hours per year.

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

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

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

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

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

- (c) The Permittee may operate the emergency SI generator for a maximum of 50 hours in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Condition IV.D.4.b(6)(b). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the Permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f)(4)]

c. Recordkeeping and Reporting Requirements

- (1) The Permittee shall keep records of the following

- (a) The Permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the Permittee operated and maintained the stationary RICE according to the maintenance plan and management practice requirements under Condition IV.D.4.b.

[40 CFR 63.6655(e)]

- (b) The Permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how

many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in Conditions II.E.2.f(2)(b) and (2)(c) the Permittee shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

[40 CFR 63.6655(f)]

(2) Reporting Requirements

- (a) The Permittee shall report any failure to perform the work practice requirements of Condition II.E.2.a per the required schedule. If the failure to perform the work practice requirement is due to an unacceptable risk under federal, state, or local law, the Permittee shall identify in the report the federal, state, or local law under which the risk was deemed unacceptable.

[Table 2d 40 CFR 63 Subpart ZZZZ]

- (b) If the engine operates for more than 15 hours per calendar year for the purposes specified in Condition IV.D.4.b(6)(b)(ii) and IV.D.4.b(6)(b)(iii), the Permittee shall submit an annual report according to the requirements in Conditions IV.D.4.c(2)(b)(i) through IV.D.4.c(2)(b)(iii) below.

[40 CFR 63.6650(h)]

- (i) The report shall 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 Condition IV.D.4.b(6)(b)(ii) and IV.D.4.b(6)(b)(iii), including the date, start time, and end time for engine operation for the purposes specified in Condition IV.D.4.b(6)(b)(ii) and IV.D.4.b(6)(b)(iii).

- (ii) The first annual report shall cover the calendar year 2015 and shall be submitted no later than

March 31, 2016. Subsequent annual reports for each calendar year shall be submitted no later than March 31 of the following calendar year.

(iii) The annual report shall be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13.

(c) The Permittee shall submit compliance certifications and all deviations pursuant to timelines specified in Condition VII.A and Condition XII.B of Attachment A, respectively.

[A.A.C. R18-2-309.2.a, -c, -d, and A.A.C. R18-2-306.A.5.b]

d. Permit Shield

Compliance with this Part shall be deemed compliance with 40 CFR 63.6580, 63.6590, 63.6603(a), 63.6605(b), 63.6625(e), 63.6625(f), 63.6625(j), 63.6640(f), 63.6650(h), 63.6655(e) and 63.6655(f).

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

V. UNCLASSIFIED SOURCES

A. Applicability

The conditions of this Section apply to equipment not classified under any other part of this general permit.

B. Operating Limitations

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

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

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

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

3. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor,

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

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

4. No person shall operate or use any machine, equipment, or other contrivance for the treatment or processing of animal or vegetable matter, separately or in combination, unless all gaseous vapors and gas entrained effluents from such operations, equipment, or contrivance have been either:

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

- a. Incinerated to destruction, as indicated by a temperature measuring device, at not less than 1,200°F if constructed or reconstructed prior to January 1, 1989, or 1,600°F with a minimum residence time of 0.5 seconds if constructed or reconstructed thereafter; or
- b. Passed through such other device which is designed, installed and maintained to prevent the emission of odors or other air contaminants and which is approved by the Director.

5. Permit Shield

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

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

C. Particulate Matter

1. Emission Limitations

The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in excess of the amounts calculated by the following equation:

- a. For process sources having a process weight rate of 30 tons per hour or less, the maximum allowable emissions shall be determined by the following equation:

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

Where:

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

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

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

- b. When applying the process weight rate equation, the Permittee shall utilize the total process weight from all similar units employing a similar type process to determine the maximum allowable emissions of

particulate matter.

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

2. Permit Shield

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

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

D. Opacity

1. Emission Limitations

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

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

2. Monitoring, Recordkeeping and Reporting Requirements

A certified EPA Reference Method 9 observer shall conduct a monthly survey of visible emissions emanating from the stacks of the fuel burning equipment when in operation. The Permittee shall keep records of the initial survey and any subsequent EPA Reference Method 9 observations performed. These records shall include the emission point observed, location of observer, name of observer, date and time of observation/survey, and the results of the observation/survey. If the opacity of the emissions observed during the initial survey appears to exceed the standard of 20%, the observer shall conduct a certified EPA Reference Method 9 observation. . If the observation shows a Method 9 opacity reading in excess of 20%, the Permittee shall report this to ADEQ as excess emission and initiate appropriate corrective action to reduce the opacity below 20%. The Permittee shall keep a record of the corrective action performed.

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

3. Permit Shield

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

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

E. Nitrogen Oxides

1. Emission Limitations

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

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

2. Permit Shield

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

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

F. Sulfur Dioxide

1. Emission Limitations

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

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

2. Permit Shield

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

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

VI. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Particulate Matter and Opacity

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

a. Emission Limitations/Standards

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

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

- (2) The Permittee shall not cause, allow or permit visible emissions from any fugitive dust point source, in excess of 20 percent opacity.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

b. Monitoring and Recordkeeping Requirements

The Permittee shall maintain records of the dates on which any of the activities listed in Condition VI.B.1.a(3)(a) through Condition VI.B.1.a(3)(h) above were performed and the control measures that were adopted.

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

c. Permit Shield

Compliance with the conditions of this Section shall be deemed

compliance with A.A.C. R18-2-604.A, A.A.C. R18-2-604.B, A.A.C. R18-2-605, A.A.C. R18-2-606, A.A.C. R18-2-607 and A.A.C. R18-2-612.

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

VII. OTHER PERIODIC ACTIVITIES

A. Abrasive Blasting

Particulate Matter and Opacity

1. Emission Limitations/Standards

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

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

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

b. Opacity

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

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

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall keep 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 the conditions of this Section shall be deemed compliance with A.A.C. R18-2-726 and A.A.C. R18-2-702.B.

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

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

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

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.
[A.A.C. R18-2-727.A]
- (2) The Permittee or their designated contractor shall not either:
 - (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
 - (b) Thin or dilute any architectural coating with a photochemically reactive solvent.
[A.A.C. R18-2-727.B]
- (3) For the purposes of Condition VII.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 VII.B.1.a(3)(a) through Condition VII.B.1.a(3)(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
 - (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.
 - (b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.
 - (c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
[A.A.C.R18-2-727.C]
- (4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Condition VII.B.1.a(3)(a) through Condition VII.B.1.a(3)(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
[A.A.C.R18-2-727.D]

b. Monitoring and Recordkeeping Requirements

- (1) Each time a spray painting project is conducted, the Permittee shall log in ink, or in an electronic format, a record of the following:
 - (a) The date the project was conducted;
 - (b) The duration of the project;
 - (c) Type of control measures employed;
 - (d) Material Safety Data Sheets for all paints and solvents used in the project; and
 - (e) The amount of paint consumed during the project.
- (2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition VII.B.1.b(1) above.

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

c. Permit Shield

Compliance with this Part shall be deemed compliance with the following applicable requirement as of the issuance date of this permit: A.A.C. R18-2-727.

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

2. Opacity

a. Emission Limitation/Standard

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

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

b. Permit Shield

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

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

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

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

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

2. Monitoring and Recordkeeping Requirement

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

form and all supporting documents.

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

3. Permit Shield

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

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