

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air Quality Division
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AIR QUALITY CONTROL GENERAL PERMIT for GENERATORS

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

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



THIS GENERAL PERMIT ISSUED SUBJECT TO THE FOLLOWING Conditions contained in
Attachments "A", "B", "C", "D", "E", "F" and "G"

ADEQ GENERAL PERMIT NUMBER 110 PERMIT CLASS II EXPIRATION DATE July 19, 2016

PERMIT ISSUED THIS 19th DAY OF July, 2011

SIGNATURE

Eric C. Massey, Director, Air Quality Division
TITLE

AIR QUALITY CONTROL
GENERAL PERMIT FOR GENERATORS

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I. INTRODUCTION

- A. This document is a General Permit for the operation of **Stationary, Stand-Alone Generators**, authorized under Arizona Administrative Code (A.A.C.) R18-2-501 through R18-2-511 and Arizona Revised Statutes (ARS) §49-426. Owners/operators of existing and new generators may choose to utilize this general permit in lieu of an individual permit. Such parties shall do so by obtaining an Authorization to Operate (ATO), which will attest to their formal agreement to abide by all conditions contained herein.
- B. This General Permit covers stationary, stand-alone generators that are subject to federal and state regulations.
- C. This General Permit does not apply to portable sources or sources that require a Class I permit, or sources operating in Maricopa County, Pima County, or Pinal County.
- D. References to the “Director” in this General Permit mean the Director of the Air Quality Division of the Arizona Department of Environmental Quality (ADEQ). References to the “Department” mean ADEQ. References to the “Administrator” mean the Administrator of Environmental Protection Agency (EPA) Region IX.

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

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, and -510]

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

II. COMPLIANCE WITH PERMIT CONDITIONS

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

- A. The Permittee shall comply with all conditions of this General Permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action, for ATO termination or revocation, or for denial of a renewal application. In addition, non-compliance with any federally enforceable requirements constitutes a violation of the Clean Air Act.
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit.

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

[A.A.C. R18-2-321.A.1.c, -321.A.1.d. and -510]

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

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

IV. POSTING OF PERMIT

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

- A.** Any person who has been granted coverage under this General Permit shall post such General Permit or a certificate of General Permit coverage on location where the equipment is installed in such a manner as to be clearly visible and accessible.
- B. Equipment Labels**
1. All emission related equipment covered by this General Permit that has been issued an ATO have either an ADEQ certified label which will include the current permit number and ATO number, and the serial or other equipment number, or be clearly marked with one of the following:

- a. Current permit number; or
 - b. A serial number or other equipment number that is also listed on the ATO.
2. All emission related equipment covered by this General Permit but not issued an ATO shall be clearly marked with one of the following:
- a. The current permit number; or
 - b. A serial number or other equipment number that is also listed in the permit application.
3. A copy of the complete General Permit and associated ATO's shall be kept on site.

V. FEE PAYMENT

[A.A.C. R18-2-326, -306.A.9, and -511]

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

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

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

- 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 emission 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.

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 permit condition. The certification shall be submitted no later than January 31st, and shall report the compliance status of the source during the period between January 1st and December 31st of the previous year.
- B. The compliance certifications shall include the following:
 1. Identification of each term or condition of the permit that is the basis of the certification;
 2. The identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period;
 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in Condition VII.B.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;
 4. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
 5. Other facts the Director may require determining 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

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

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

IX. INSPECTION AND ENTRY

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

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

- A. Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the 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

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

If the sources which have been issued ATOs become 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 sources will comply with the standard

XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

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

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:
 - i. Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XI.A.1.b below.
 - ii. Detailed written notification by submission of an excess emissions

report within 72 hours of the notification pursuant to Condition XI.A.1.a.i above.

- b. The report shall contain the following information:
 - i. Identity of each stack or other emission point where the excess emissions occurred;
 - ii. Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
 - iii. Date, time and duration, or expected duration, of the excess emissions;
 - iv. Identity of the equipment from which the excess emissions emanated;
 - v. Nature and cause of such emissions;
 - vi. If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and
 - vii. Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

- 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

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

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

C. Emergency Provision

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

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

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

D. Compliance Schedule

[ARS § 49-426.1.5]

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

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

[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 XI.E.3.b below, and unless otherwise provided

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

- i. The excess emissions could not have been prevented through careful and prudent planning and design;
 - ii. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - iii. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - iv. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - v. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - vi. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
 - vii. All emissions monitoring systems were kept in operation if at all practicable; and
 - viii. 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 XI.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 XI.E.2 above.

5. Demonstration of Reasonable and Practicable Measures

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

XII. RECORD KEEPING REQUIREMENTS

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

- A.** The Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;
 - 3. The name of the company or entity that performed the analyses;
 - 4. A description of the analytical techniques or methods used;
 - 5. The results of such analyses; and
 - 6. The operating conditions as existing at the time of sampling or measurement.
- B.** The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- C.** All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

XIII. REPORTING REQUIREMENTS

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

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.** Other reports required by any condition of Attachment "B".
- D.** Performance test results in accordance with Condition XVI.G. of Attachment "A".
- E.** Any records required by Attachment "B" when requested by the Director.

XIV. DUTY TO PROVIDE INFORMATION

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

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

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

XV. 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.

XVI. FACILITY CHANGE ALLOWED WITHOUT OBTAINING AN ADDITIONAL ATO [A.A.C. R18-2-306.A.4 and -317.02]

- A.** Except for a physical change or change in the method of operation at a Class II source requiring a permit revision under R18-2-317.01, or a change subject to logging or notice requirements in subsection B or 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, 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 R18-2-101(57)(a) through (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 of 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 source 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 subsection C above, the written notice shall be by certified mail or hand delivery and shall be received by the Director the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change as possible. The written notice shall include:

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

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

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 subsection R18-317.01(A).

- G.** If a source change is described under both subsections B and C above, the source shall comply with subsection C. If a source change is described under both subsections C above and R18-2-317.01(B), the source shall comply with R18-2-317.01(B).
- H.** A copy of all logs required under subsection (B) shall be filed with the Director within 30 days after each anniversary of the Permittee obtaining initial coverage under the General Permit. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.
- I. Logging Requirement**
1. Each log entry required by a change under subsection 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, 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 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.

XVII. TESTING REQUIREMENTS

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

- A.** The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.
- B. Operational Conditions During Testing**
- Tests shall be conducted during operation at the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.
- C.** Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

D. Test Plan

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

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

E. Stack Sampling Facilities

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

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

F. Interpretation of Final Results

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

G. Report of Final Test Results

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

XVIII. PROPERTY RIGHTS

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

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

XIX. SEVERABILITY CLAUSE

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

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

XX. PERMIT SHIELD

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

As of the date an ATO for a source is granted, compliance with the conditions of this General Permit shall be deemed compliance with all applicable requirements in effect on the date of General Permit issuance, provided that such applicable requirements are included and expressly identified in this permit. The permit shield shall not apply to any changes made pursuant to Sections XVII of this Attachment.

XXI. ACCIDENTAL RELEASE PROGRAM

[40 CFR Part 68]

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

XXII. APPLICABILITY OF NSPS and NESHAP GENERAL PROVISIONS

[40 CFR Part 60, Part 63]

For all emission related equipment subject to a New Source Performance Standards (NSPS)/National Emissions Standards for Hazardous Air Pollutants (NESHAP), 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.

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

ATTACHMENT “B”: SPECIFIC CONDITIONS

I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN

[ARS §49-404.C and -426]

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

II. FACILITY WIDE LIMITATIONS

A. Operational Limitations

The Permittee shall not operate the generator(s) for more than the number of hours allowed in the Authorization(s) To Operate (ATO) associated with this General Permit as determined on a rolling twelve (12) month total.

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

[Material permit conditions are indicated by underline and italics]

B. Stack Requirements

1. The exhaust stack discharge of the generator stack(s) shall be vertical and its height above ground shall be 14 feet or greater.
2. If the stacks are equipped with rain caps, they must be hinged.

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

C. Fuel Limitations

The Permittee shall only burn the fuel specified on the ATO(s).

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

D. Maintenance Requirement

The Permittee shall operate and maintain the generator(s) in accordance with manufacturer’s specifications.

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

E. Recordkeeping Requirements

1. The Permittee shall record the monthly operating hours at the end of each month for each generator identified on the ATO associated with this General Permit that have operating hour restrictions, and shall calculate a rolling twelve (12) month total for each generator utilizing either of the following methods:
 - a. Maintain records which include the date, the starting time (in hours and minutes), and the stopping time (in hours and minutes); or
 - b. Maintain records of the monthly operating hours of the generator(s) using the hour meters installed on the equipment.
2. The Permittee shall maintain on-site, records of the following for each of the generator identified in the ATO(s) associated with this General Permit:

- a.. Manufacturer's specifications; and
- b. Manufacturer's emission data or certified lab test data if the Permittee used this data when applying for coverage under this general permit.

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

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

ATTACHMENT "C": NON-NSPS REQUIREMENTS FOR GENERATORS

I. APPLICABILITY

This Section applies to internal combustion engines identified as Non-NSPS applicable on the associated Authorization To Operate (ATO).

II. Particulate Matter and Opacity

A. Emission Limitations and Standards

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

1. Particulate Matter

- a. 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:

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

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

Q = the heat input in million Btu per hour

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

2. Opacity

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

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

B. Monitoring and Recordkeeping

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

1. The Permittee shall conduct quarterly survey of visible emissions emanating from each generator stack when the generator is in operation. If the opacity of the emissions observed appears to exceed the opacity limit, the observer shall conduct a certified EPA Reference Method 9 observation. The Permittee shall keep records of the survey and any EPA Reference Method 9 observations performed, including date, time, generator stack ID, location of observer, name of the observer, and results of the observation. If the observation results in an exceedance of the opacity limit, the Permittee shall to take

corrective action and log all such actions. Any exceedance shall be reported as excess emissions in accordance with Section XI of Attachment "A".

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

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

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

III. 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. 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 or other documentation listing the sulfur content to demonstrate compliance with the sulfur content limit specified in Condition III.A.2 of this Attachment. 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 [A.A.C. R18-2-325]

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

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

ATTACHMENT "D": NSPS REQUIREMENTS FOR COMPRESSION IGNITION

INTERNAL COMBUSTION ENGINES (CI ICE)

I. GENERAL REQUIREMENTS

A. Applicability

This Attachment is applicable to generator(s) identified as subject to New Source Performance Standards (NSPS) Subpart IIII on the respective Authorization To Operate (ATO).

B. Timelines for Installation or Importing Previous Model Year CI ICE [40 CFR 60.4208]

1. The Permittee shall not install a stationary CI ICE (excluding fire pump engines) that does not meet the applicable requirements for 2007 model year engines.
2. The Permittee shall not install a stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that does not meet the applicable requirements for 2008 model year engines.
3. After December 31, 2014, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19KW (25 HP) and less than 56 KW (75 HP) that does not meet the applicable requirements for 2013 model year non-emergency engines.
4. After December 31, 2013, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that does not meet the applicable requirements for 2012 model year non-emergency engines.
5. After December 31, 2012, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP) that does not meet the applicable requirements for 2011 model year non-emergency engines.
6. After December 31, 2016, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that does not meet the applicable requirements for 2015 model year non-emergency engines.
7. After December 31, 2018, the Permittee shall not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 600 KW (840 HP) and less than 2000 KW (2680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.
8. In addition to the above requirements listed in I.B.1 through 7, the Permittee shall not import any stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet

the applicable requirements specified in conditions I.B.1 through 7 of this section after the dates specified in conditions I.B.1 through 7 of this section.

9. The requirements of condition I.B do not apply to stationary CI ICE that have been modified, reconstructed, or engines moved from one existing location and reinstalled at a new location.
10. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4208. [A.A.C. R18-2-325]

C. Operating Requirements

1. The Permittee shall operate and maintain the CI ICE and the control device according to the manufacturer's written instructions, over the entire life of the engine. [40 CFR 60.4211(a), 60.4206 and A.A.C. R18-2-306.A.3]
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 applicable requirements of 40 CFR Part 89, 94 and 1068. [40 CFR 60.4211(a)]
4. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4211(a) and 60.4206. [A.A.C. R18-2-325]

D. Fuel Requirements

1. The Permittee operating a stationary CI ICE shall use diesel fuel that meets the requirements of non road diesel fuel listed in 40 CFR 80.510(b) and listed below:
 - 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)]
2. The Permittee operating a pre-2011 model year stationary CI ICE subject to this Attachment may petition the Administrator and the Director for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs I.D.1 of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the Permittee is required to submit a new petition to the Administrator and the Director. [40 CFR 60.4207(c)]
3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4207(b), and 60.4207(c). [A.A.C. R18-2-325]

II. NON-EMERGENCY CI ICE

[40 CFR 60.4204(a), (b) and §60.4201(a), (d)]

A. Applicability

This Section is applicable to generators identified as Non-Emergency use and NSPS Subpart IIII applicable on the respective ATO.

B. Emission Limitations and Standards

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

Table A: Emission Standards for Non-Emergency CI ICE

Model Year	Maximum Engine Rating	Displacement (Liters per cylinder)	Applicable regulations
Pre-2007	≤ 2237 kilowatt (3000 horsepower)	Less than 10	Table 1 of 40 CFR Part 60 Subpart IIII
		≥ 10 and < 30	Tier 1 standards of 40 CFR 94.8(a)(1)
2007 and Later	≤ 2237 kilowatt (3000 horsepower)	Less than 10	40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115
		≥ 10 and < 30	40 CFR 94.8

2. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4204(a), 60.4204(b), 60.4201(a), and 60.4201(d). [A.A.C. R18-2-325]

C. Compliance Requirements

1. Pre-2007 Model Year Stationary CI ICE

[40 CFR 60.4211(b)]

The Permittee operating a pre-2007 model year and must comply with the emission standards specified in Table A above, shall demonstrate compliance according to one of the methods specified in paragraphs II.C.1.a through d of this section:

- a. Purchasing an engine certified according to 40 CFR Part 89 or Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR Subpart IIII and these methods must have been followed correctly.
- c. Keeping records of engine manufacturer data indicating compliance with the standards.

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

2. 2007 and later Year Stationary CI ICE [40 CFR 60.4211(c)]

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

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4211(b), and §60.4211(c). [A.A.C. R18-2-325]

D. Recordkeeping Requirements

1. Non-certified ICE > 10 liters/cylinder or pre-2007 ICE > 130 KW (175 hp) [40 CFR 60.4214(a)(2)(ii) & (iv)]

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

- a. Maintenance conducted on the engine; and
- c. Documentation from the manufacturer that the engine meets the emission standards.

2. Certified ICE

The Permittee operating a certified CI ICE shall keep documentation from the manufacturer that the engine is certified to meet the emission standards. [40 CFR 60.4214(a)(2)(iii)]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4214(a)(2)(ii), 60.4214(a)(2)(iii), and 60.4214(a)(2)(iv). [A.A.C. R18-2-325]

III. EMERGENCY CI ICE

A. Applicability

This Section is applicable to generators identified as Emergency use and NSPS Subpart IIII applicable on the respective ATO.

B. Emergency ICE [40 CFR 60.4219]

An emergency ICE shall be limited to emergency situations and required testing and maintenance only such as to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power

as part of a financial arrangement with another entity shall not be considered to be emergency engines.

C. Operating Requirements

1. The Permittee shall install a non-resettable hour meter prior to startup of the engine
[40 CFR 60.4209(a), R18-2-306.A.3, -331.A.3.a]
 [Material Permit Conditions are indicated by underline and italics]
2. The Permittee may operate the stationary ICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine.
[40 CFR 60.4211(f)]
3. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee may petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. The Permittee may operate the emergency stationary ICE for up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
[40 CFR 60.4211(f)]
4. Operation of the CI ICE other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, is prohibited.
[40 CF 60.4211(f), R18-2-331.A.3.a]
 [Material permit conditions are indicated by underline and italics]
5. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4209(a) and §60.4211(f). [A.A.C. R18-2-325]

D. Emission Limitations and Standards

1. The Permittee operating a new or modified or reconstructed emergency CI ICE shall comply with the emission standards listed in the corresponding applicable regulations for the same model year and cylinder displacement as stated in Table B below:

Table B: Emission Standards for Emergency ICE [40 CFR 60.4205(a), (b), (c),(f)]

Engine Type	Model Year	Displacement (Liters per cylinder)	Applicable regulations
Non-Fire Pump Engines	Pre-2007	Less than 10	Table 1 of 40 CFR Part 60 Subpart IIII
	2007 and Later	Less than 30	New Non-road engines in 40 CFR 60.4202
Fire Pump	All	Less than 30	Table 4 of 40 CFR Part 60 Subpart IIII

2. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4205(a), §60.4205(b), §60.4205(f), and §60.4205(c). [A.A.C. R18-2-325]

E. Compliance Requirements

1. Pre-2007 Model Year Engines

[40 CFR 60.4211 (b)]

The Permittee operating a pre-2007 model year stationary CI ICE or a CI fire pump manufactured prior to the model years in Table 3 of 40 CFR Part 60 Subpart III, shall demonstrate compliance according to one of the following methods:

- a. Purchasing an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
- c. Keeping records of engine manufacturer data indicating compliance with the standards.
- d. Keeping records of control device vendor data indicating compliance with the standards.

2. 2007 and later Year Stationary CI ICE

[40 CFR 60.4211 (c)]

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

3. Modified or Reconstructed Stationary ICE

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

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

[40 CFR 60.4211(e), 60.4205(e)]

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

a. CI ICE less than 100 HP

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

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

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

c. CI ICE greater than 500 HP

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

[40 CFR 60.4211(g)]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4211(b), §60.4211(c), §60.4211(e), §60.4211(g) and §60.4205(e).

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

F. Recordkeeping Requirements

[40 CFR 60.4214(b)]

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

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4214(b). [A.A.C. R18-2-325]

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

ATTACHMENT "E": NSPS REQUIREMENTS FOR STATIONARY SPARK IGNITION

INTERNAL COMBUSTION ENGINES (SI ICE)

I. GENERAL REQUIREMENTS

A. Applicability

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

B. Timelines for Importing or Installing Previous Model Year SI ICE [40 CFR 60.4236]

1. After July 1, 2010, the Permittee shall not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in Section III of this Attachment.
2. After July 1, 2009, the Permittee shall not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in Section III of this Attachment may not be installed after January 1, 2010.
3. For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), the Permittee shall not install engines that do not meet the applicable requirements in Section III of this Attachment after January 1, 2011.
4. In addition to the requirements specified in Section III of this Attachment, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in Section III of this Attachment, after the date specified in the same.
5. The requirements of Condition I.B do not apply to any SI ICE that have been modified or reconstructed, and or if moved from one existing location and reinstalled at a new location.

C. The Permittee shall operate and maintain the stationary SI ICE that complies with the emission standards listed in this Attachment over the entire life of the engine. [40 CFR 60.4234]

D. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR 60.4234 and 60.4236. [A.A.C. R18-2-325]

II. FUEL REQUIREMENTS

A. Gasoline Fuel Sulfur Limits

The Permittee operating a stationary SI ICE subject to this Attachment that use gasoline shall use gasoline that meets 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 Part shall be deemed compliance with 40 CFR 60.4235. [A.A.C. R18-2-325]

III. EMISSION STANDARDS – NON-EMERGENCY SI ENGINES

A. Applicability

This Section is applicable to generators identified as Non-Emergency use and NSPS Subpart JJJJ applicable on the respective ATO.

B. The Permittee operating an SI ICE that commenced construction (date engine was ordered), or modified or reconstructed after **June 12, 2006** and that was manufactured in the year specified in Table C below shall comply with the emission standards listed in under the Applicable Regulations for the same engine rating and model year:

Table C: Emission Standards for Non-Emergency SI ICE [40 CFR 60.4233]

Item	Engine Rating	Manufacture Date	Applicable Regulations	
1	≤ 19 kW (25 HP)	On or after July 1, 2008	40 CFR 60.4231(a) – Standards for New Nonroad SI Engines in 40 CFR Part 90 or Part 1048, as applicable	
2	> 19 kW (25 HP) < 500 HP	On or after July 1, 2008	Gasoline Engines 40 CFR 60.4231 (b)	Rich Burn LPG Engines 40 CFR 60.4231 (c)
3	≥ 500 HP	On or after July 1, 2007		
4	≥ 500 HP < 1350 HP (Lean Burn)	On or after January 1, 2008		
5	> 19 kW (25 HP) < 75 kW (100 HP) (except gasoline & rich burn LPG)	On or after January 1, 2011	Field testing standards in 40 CFR Part 1048.101(c)	
		Prior to January 1, 2011	If certified to Table 1 of 40 CFR Part 60 Subpart JJJJ Emission Standards for SI ICE > 100 HP and < 500 HP, Permittee may chose to be subject to the same standards	
6	≥ 75 kW (100 HP) (except gasoline & rich burn LPG)		Table 1 of 40 CFR Part 60 Subpart JJJJ	
		Prior to January 1, 2011	If certified to CO limit for non-severe duty engines in 40 CFR Part 1048 and above the CO standard in Table 1 of 40 CFR Part 60 Subpart JJJJ, Permittee may meet CO certification standard	

	Modified or Reconstructed ICE Rating	Manufacture Date	NOx	CO	VOC
7	Modified or Reconstructed After June 12, 2006 & > 130 HP < 500 HP	Prior to July 1, 2008	3.0 g/hp-hr or 250 ppmvd @ 15% O ₂	4.0 g/hp-hr or 540 ppmvd @ 15% O ₂	1.0 g/hp-hr or 86 ppmvd @ 15% O ₂
8	Modified or Reconstructed After June 12, 2006 & ≥ 500 HP	Prior to July 1, 2007			
9	Modified or Reconstructed After June 12, 2006 & > 19kW (25hp) < 100hp		n/a	5.0 g/hp-hr or 675 ppmvd @ 15% O ₂	n/a

n/a – not applicable

D. Compliance Requirements

[40 CFR 60.4243]

1. The Permittee operating a stationary SI ICE manufactured after July 1, 2008, and must comply with the emission standards specified in the applicable regulation in items 1 through 4 of Table C above, shall comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. The Permittee shall also meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance.
2. The Permittee shall also meet one of the requirements specified in III.D.2.a and b of this section:
 - a. If the Permittee operates and maintains the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions, the Permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required.
 - b. If the Permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and compliance shall be demonstrated according to III.D.2.b.i through iii of this section, as appropriate.
 - i. Stationary SI ICE less than 100 HP

The Permittee operating a stationary SI internal combustion engine less than 100 HP shall develop a maintenance plan and keep 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. No performance testing is required.
 - ii. Stationary SI ICE greater than or equal to 100 HP and less than or equal to 500 HP

The Permittee operating a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP shall develop a maintenance plan and keep 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 to demonstrate compliance.

iii. Stationary SI ICE greater than 500 HP

The Permittee operating a stationary SI internal combustion engine greater than 500 HP, shall develop a maintenance plan and keep 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.

3. The Permittee operating a stationary SI internal combustion engine subject to the emission standards specified in the applicable regulation in items 5 through 9 of Table C above, shall demonstrate compliance according to one of the methods specified in paragraphs III.D.3.a and b of this section.

a. If the SI ICE engine is a certified engine according to procedures specified in 40 CFR subpart JJJJ, for the same model year, compliance shall be demonstrated according to one of the methods specified in paragraph III.D.1 of this section.

b. If the SI ICE engine is a non-certified engine, demonstration of compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, shall be made according to paragraphs III.D.3.b.i and III.D.3.b.ii of this section.

i. Stationary SI ICE greater than 25 HP and less than or equal to 500 HP

The Permittee operating a stationary SI ICE greater than 25 HP and less than or equal to 500 HP, shall develop a maintenance plan and keep 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.

ii. Stationary SI ICE greater than 500 HP

The Permittee operating a stationary SI ICE greater than 500 HP, shall develop a maintenance plan and keep records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control

practice for minimizing emissions. In addition, the Permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

4. If the Permittee does not operate or maintain the SI ICE or control device according to the manufacturer's written emission-related instructions, the Permittee shall perform an initial performance test. Subsequent tests will be required if the engine is rebuilt or undergoes major repair or maintenance. [40 CFR 60.4243(f)]
5. The Permittee operating a modified or reconstructed stationary SI ICE that must comply with the emission standards specified in the applicable regulation in Table C above, shall demonstrate compliance according paragraph III.D.2.a or b. of this section, except that if you comply according to paragraph III.D.2.b of this section, the non-certified engine shall be demonstrated to comply with the emission standards specified in the applicable regulation in Table C above. [40 CFR 60.4243(c)]
6. The Permittee operating a stationary SI ICE with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards stated in the applicable regulations identified in items 2 through 4 of Table C above shall comply by one of the methods specified below:
 - a. Purchasing an engine certified according to 40 CFR Part 1048. The engine must be installed and configured according to the manufacturer's specifications.
 - b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
 - c. Keeping records of engine manufacturer data indicating compliance with the standards.
 - d. Keeping records of control device vendor data indicating compliance with the standards. [40 CFR 60.4243(h)]

E. Recordkeeping Requirements

[40 CFR 60.4245(a)]

The Permittee shall meet the following recordkeeping requirements:

1. Keep records of all notifications submitted to comply with this Attachment and all documentation supporting any notification.
2. Keep records of all maintenance conducted on each engine.
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.

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.
5. The Permittee operating a stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 shall submit an initial notification as required in §60.7(a)(1). The notification must include the following information:
 - a. Name and address of the Permittee;
 - b. The address of the affected source;
 - c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - d. Emission control equipment; and
 - e. Fuel used.
6. The Permittee operating a stationary SI ICE that is subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

F. Testing Procedures

[40 CFR 60.4244]

1. The Permittee operating a stationary SI ICE required to conduct a performance test(s) shall follow the procedures specified in 40 CFR 60.4244.
2. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4244.

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

G. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4233, and §60.4234.

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

IV. EMISSION STANDARDS – EMERGENCY SI ENGINES

A. Applicability

This Section is applicable to generators identified as Emergency use and NSPS Subpart JJJJ applicable on the respective ATO.

- B.** The Permittee operating an SI ICE that commenced construction (date engine was ordered) or modified or reconstructed after June 12, 2006, and manufactured on or after the date specified in the table below shall comply with the emission standards listed in the applicable standards as stated in Table D below:

Table D: Emission Standards for Emergency SI ICE

	Engine Rating	Manufacture Date	Applicable Regulation		
1	> 19 KW (25 HP)	On or After January 1, 2009	Gasoline Engines 40 CFR 60.4231(b)	Rich Burn LPG Engines 40 CFR 60.4231(c)	
2	> 19 KW (25 HP) (except gasoline & rich burn LPG ICE)	On or After January 1, 2009	Emission Standards in Table 1 of 40 CFR Part 60 Subpart JJJ		
3	Modified or Reconstructed After June 12, 2006 & >130 HP	Prior to January 1, 2009	<u>NO_x</u> 3.0 g/HP-hour or 250ppmvd @ 15% O ₂	<u>CO</u> 4.0 g/HP-hr or 540 ppmvd @ 15% O ₂	<u>VOC</u> 1.0 g/HP-hr or 86 ppmvd @ 15% O ₂

C. Operating Requirements

[40 CFR 60.4243(d)]

1. The Permittee may operate the emergency stationary ICE for the purposes of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The Permittee shall petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. The Permittee may operate the emergency stationary ICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
2. The Permittee is prohibited from operating the emergency ICE for any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year. [40 CFR 60.4243(d), R198-2-331.A.3.a] [Material Permit Conditions are indicated by underline and italics]
3. The Permittee operating a stationary SI natural gas fired engines 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 §60.4233. [40 CFR 60.4243(e)]

D. Monitoring Requirements

1. Emergency SI ICE greater than or equal to 500 HP

Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter. [40 CFR 60.4237(a), R18-2-331.A.3.a]
[Material Permit Conditions are indicated by underline and italics]

2. Emergency SI ICE greater than or equal to 130 HP and less than 500 HP

Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter. [40 CFR 60.4237(b), R18-2-331.A.3.a]
[Material Permit Conditions are indicated by underline and italics]

3. Emergency SI ICE less than 130 HP

If the emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, the Permittee shall install a non-resettable hour meter upon startup of the emergency engine. [40 CFR 60.4237(c), R18-2-331.A.3.a]
[Material Permit Conditions are indicated by underline and italics]

E. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4237. [A.A.C. R18-2-325]

V. RECORDKEEPING & REPORTING REQUIREMENTS

[40 CFR 60.4245]

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

1. Records of all notifications submitted to comply with this Attachment and all documentation supporting any notification.
2. Maintenance conducted on the engine.
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.
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.

- B.** For all stationary SI emergency 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.

- C. For all stationary SI emergency 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.
- 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.
- E. The Permittee operating a stationary SI ICE greater than or equal to 500 HP that have 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:
 - 1. Name and address of the Permittee;
 - 2. The address of the affected source;
 - 3. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - 4. Emission control equipment; and
 - 5. Fuel used.

F. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 60.4245.
[A.A.C. R18-2-325]

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

ATTACHMENT “F”: NESHAPS REQUIREMENTS FOR GENERATORS

I. DEFINITIONS

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

II. APPLICABILITY

A. This Attachment is applicable to generators identified as applicable to NESHAP Subpart ZZZZ standards on the respective ATO.

B. **New or Reconstructed stationary RICE** [40 CFR 63.6590 (a)(2); 63.6590(a)(3)]

Stationary RICE is new if the construction or reconstruction of the RICE commenced after June 12, 2006. A stationary RICE is reconstructed if it meets the definition of reconstruction in 40 CFR §63.2. The Permittee operating new or reconstructed RICE shall meet the requirements of this Attachment by meeting the requirements of 40 CFR Part 60 subpart IIII, for compression ignition engines or 40 CFR Part 60 subpart JJJJ, for spark ignition engines.

III. COMPLIANCE DATES

[40 CFR 63.6595]

A. The Permittee operating an existing Compression Ignition (CI) RICE subject to the requirements of this Attachment and identified on the respective ATO shall comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

B. The Permittee operating an existing stationary Spark Ignition (SI) RICE subject to the requirements of this Attachment and identified on the respective ATO shall comply with the applicable emission limitations and operating limitations no later than October 19, 2013.

IV. NOTIFICATION REQUIREMENTS

[40 CFR 63.6595(c), 63.6645]

A. The Permittee operating a stationary RICE subject to the requirements of this Attachment, shall comply with the applicable notification in 40 CFR Part 63, subpart A and §63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

B. Exemptions from Notification Requirements

The notification requirements do not apply to any existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

V. GENERAL REQUIREMENTS

[40 CFR 63.6605]

A. The Permittee shall comply with the applicable emission limitations and operating limitations in this Attachment at all times.

B. The Permittee shall operate and maintain at all times any RICE subject to the requirements of this Attachment, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and 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 required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator and the Director which 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.

C. The Permittee operating an existing stationary RICE must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 1d, 2a, 2c, and 2d to 40 CFR Part 63 subpart ZZZZ apply. [40 CFR 63.6625(h)]

D. Fuel Requirements - Non-Emergency CI RICE > 300 HP

[40 CFR 63.6604]

The Permittee operating an existing non-emergency CI RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder (l/cyl) that uses diesel fuel, shall use diesel fuel that meets the following per-gallon standards as required in 40 CFR 80.510(b) for nonroad diesel fuel:

1. Sulfur content - 15 ppm maximum for Nonroad diesel fuel.
2. Cetane index or aromatic content, as follows:
 - a. A minimum cetane index of 40; or
 - b. A maximum aromatic content of 35 volume percent.

E. The Permittee operating a stationary RICE subject to this Attachment shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's

emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]

F. Oil Analysis Program

If the Permittee prefers to extend the oil change requirements specified in Section VI & VII of this Attachment, an oil analysis program shall be performed. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and water content. The condemning limits for these parameters are as follows:

Total Base Number	-changed less than 30 percent of Total Base Number of oil when new;
Viscosity	-changed more than 20 percent from the viscosity of oil when new;
Water Content	-changed more than 0.5 percent by volume

If all of the above limits are not exceeded, the Permittee is not required to change the oil. If any of the above limits are exceeded, the Permittee shall change the oil within 2 days of receiving the results of the analysis or before commencing operation, whichever is later. The analysis program shall be part of the maintenance plan for the operation of the engine. [40 CFR 63.6625(i)]

- G.** Compliance with any numerical emission limitations in this Attachment shall be based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 of 40 CFR Part 63 subpart ZZZZ. [40 CFR 63.6603]

H. Reporting Requirements

1. The Permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 63.6645. [40 CFR 63.6630(c)]
2. The Permittee shall report each instance in which the applicable emission limitation or operating limitation in Table 2b and Table 2d to subpart ZZZZ were not met. These instances are deviations from the emission and operating limitations. These deviations must be reported according to the requirements in §63.6650. If the catalyst is changed, the Permittee shall reestablish the values of the operating parameters measured during the initial performance test. Upon reestablishing the values of the operating parameters, the Permittee shall conduct an additional performance test to demonstrate that the required emission limitations applicable to the stationary RICE are met. [40 CFR 63.6640(b)]
3. The Permittee shall also report each instance in which the applicable requirements of Table 8 to subpart ZZZZ were not met.
4. If the Permittee is required to conduct a performance test, a Notification of Intent to conduct a performance test shall be submitted at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
5. If the Permittee is required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, a Notification of Compliance Status shall be submitted in accordance with §63.9(h)(2)(ii).

- a. For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, the Permittee shall submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
 - b. For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, the Permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).
6. The Permittee shall submit each applicable report in Table 7 of subpart *ZZZZ*. [40 CFR 63.6650(a)]
7. Unless otherwise indicated, all reports required under this Attachment shall be submitted along with the annual compliance certification requirement specified in Attachment “A” of this general permit. [40 CFR 63.6650(b)]
8. Deviation Reports [40 CFR 63.6650(d)]
1. For each deviation from an emission or operating limitation that occurs for a stationary RICE where a CMS is not used to comply with the emission or operating limitations in this Attachment, the Compliance report shall contain the information in addition to that required in Condition XII of Attachment “A” to this general permit:
 - a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
 - b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
 2. For each deviation from an emission or operating limitation occurring for a stationary RICE where a CMS is used to comply with the emission and operating limitations in this Attachment, the Permittee shall include information the following information in addition to that required in Condition XII of Attachment “A” to this general permit:
 - a. The date and time that each malfunction started and stopped.
 - b. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - c. The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
 - d. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

- e. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- f. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- g. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
- h. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
- i. A brief description of the stationary RICE.
- j. A brief description of the CMS.
- k. The date of the latest CMS certification or audit.
- l. A description of any changes in CMS, processes, or controls since the last reporting period.

9. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 63.6605, 63.6625(h), 63.6604, 63.6625(e), 63.6625(i), 63.6630(c),(b), 6650(a), (b), (d).
[A.A.C. R18-2-325]

VI. NON-EMERGENCY ENGINES

A. Operational Work Practice Standards

The Permittee operating a stationary RICE shall comply with the operational or emissions standards for the same engine rating as stated in the table below:

1. CI RICE ≤ 300 brake HP

The Permittee operating an existing non-emergency CI stationary RICE less than or equal to 300 brake HP shall comply with the following requirements:

- a. The Permittee shall change oil and filter every 1000 hours of operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described in condition V.F. of this Attachment shall be completed.

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ; 63.6625(i)]

- b. The Permittee shall inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

- c. The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

2. CI RICE 300 < HP ≤500

The Permittee operating an existing non-emergency CI stationary RICE with a size rating greater than 300 brake HP and less than or equal to 500 brake HP shall comply with the one of the following limits for emissions of carbon monoxide (CO) in the stationary RICE exhaust;

- a. CO concentration - 49 ppmvd at 15 percent oxygen;
- b. Reduce CO emissions by 70 percent or more.
[40 CFR 63.6603(a); Table 2d to Subpart ZZZZ of Part 63]

3. 4SLB & 4SRB RICE ≤ 500 HP

The Permittee operating a non-emergency, Four-Stroke Lean Burn (4SLB) or Four-Stroke Rich Burn (4SRB) stationary RICE with a size rating less than or equal to 500 brake HP shall comply with the following requirements:

- a. The Permittee shall change oil and filter every 1,440 hours of operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described in condition V.F. of this Attachment shall be completed.
[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ; 63.6625(i)]
- b. The Permittee shall inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]
- c. The Permittee shall inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

4. CI RICE & 4SLB > 500 HP

- a. CI RICE

The Permittee operating a non-emergency CI stationary RICE with a size rating greater than 500 brake HP shall comply with the one of the following limits for emissions of carbon monoxide (CO) in the stationary RICE exhaust;

- i. CO concentration - 23 ppmvd at 15 percent oxygen;
- ii. Reduce CO emissions by 70 percent or more.
[40 CFR 63.6603(a); Table 2d to Subpart ZZZZ of Part 63]

b. 4SLB RICE

The Permittee operating a non-emergency 4SLB stationary RICE with a size rating greater than 500 brake HP shall comply with the one of the following limits for emissions of carbon monoxide (CO) in the stationary RICE exhaust;

- i. CO concentration - 47 ppmvd at 15 percent oxygen;
- ii. Reduce CO emissions by 93 percent or more.

[40 CFR 63.6603(a); Table 2d to Subpart ZZZZ of Part 63]

c. The Permittee operating a non-emergency 4SLB stationary RICE with a size rating greater than 500 brake HP for 24 hours or less per calendar year shall comply with the following work practice:

- i. The Permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described in condition V.F. of this Attachment shall be completed.

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ; 63.6625(i)]

- ii. The Permittee shall inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

- iii. The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

d. If the Permittee operates a non-emergency CI or 4SLB RICE using an oxidation catalyst for more than 24 hours per calendar year shall comply with the following operating limitations:

- i. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and

- ii. Maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

[Table 2b to Subpart ZZZZ of Part 63]

e. If the Permittee operates a non-emergency CI or 4SLB RICE without using an oxidation catalyst to comply with the corresponding emissions reduction shall comply with operating limitations approved by the Administrator and the Director.

[Table 2b to Subpart ZZZZ of Part 63]

6. 4SRB RICE > 500 HP

- a. The Permittee operating a non-emergency 4SRB stationary RICE with a size rating greater than 500 brake HP shall comply with the one of the following limits for emissions of formaldehyde in the stationary RICE exhaust;
 - i. Formaldehyde concentration – 2.7 ppmvd at 15 percent oxygen;
 - ii. Reduce formaldehyde emissions by 76 percent or more.
- b. The Permittee operating an existing 4SRB RICE greater than 500 HP that operates for more than 24 hours per calendar year and uses a NSCR to comply with the formaldehyde emissions reduction or concentration shall comply with the following operating limitations:
 - i. Maintain catalyst such that pressure drop across catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and
 - ii. Maintain the temperature of the stationary ICE exhaust so that the catalyst inlet temperature is greater than or equal to 750°F and less than or equal to 1250°F.
- c. The Permittee operating an existing 4SRB RICE greater than 500 HP that operates for more than 24 hours per calendar year and does not use a NSCR to comply with the formaldehyde emissions reduction or concentration shall comply with any operating limitations approved by the Administrator and the Director.
- d. The Permittee operating a non-emergency 4SRB stationary RICE with a size rating greater than 500 brake HP that operate 24 hours or less per calendar year shall comply with the following work practice:
 - i. The Permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described in condition V.F. of this Attachment shall be completed.
[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ; 63.6625(i)]
 - ii. The Permittee shall inspect spark plugs every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]
 - iii. The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

7. 2SLB RICE

The Permittee operating a non-emergency, Two-Stroke Lean Burn (2SLB) stationary RICE shall comply with the following requirements:

- a. The Permittee shall change oil and filter every 4,320 hours of operation or annually, whichever comes first. If the Permittee prefers to extend the oil

change requirement, an oil analysis program described in condition V.F. of this Attachment shall be completed.

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ; 63.6625(i)]

b. The Permittee shall inspect spark plugs every 4,320 hours of operation or annually, whichever comes first.

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

c. The Permittee shall inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

8. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 63.6603(a); 63.6625(i); and Table 2d & Table 2b of 40 CFR 63 subpart ZZZZ.

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

B. Compliance Demonstrations

[40 CFR 63.6612, 63.6630(a), (b), and Table 4 and 5 Subpart ZZZZ]

1. Initial Compliance

a. The Permittee shall demonstrate initial compliance with each applicable emission and operating limitation according to Table 5 of 40 CFR subpart ZZZZ.

b. The Permittee operating an existing stationary RICE subject to a numerical emissions limitation shall conduct any initial performance test or other initial compliance demonstration according to the applicable portions of Tables 4 and 5 of 40 CFR Part 63 subpart ZZZZ within 180 days after the compliance date specified for the stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

c. The Permittee shall establish each applicable operating limitation required in Table 2b during the initial performance test.

[40 CFR 6630(b)]

2. Continuous Compliance

[40 CFR 60 Subpart ZZZZ Table 6]

a. The Permittee shall demonstrate continuous compliance with each applicable emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to subpart ZZZZ according to methods specified in Table 6 of subpart ZZZZ.

b. Use of Oxidation Catalyst & CPMS

The Permittee using an oxidation catalyst to reduce CO emissions and using a Continuous Parameter Monitoring System shall demonstrate initial compliance of CO percent reduction by conducting an initial performance test and installing a CPMS to continuously monitor the catalyst inlet temperature according to the requirements in 63.6625(b) and by recording the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

c. Without use of Oxidation Catalyst

The Permittee not using an oxidation catalyst to reduce CO emissions shall demonstrate the CO percent reduction by conducting an initial performance test and installing a Continuous Parameter Monitoring System to continuously monitor operating parameters (if any) approved by the Administrator and the Director according to the requirements in 63.6625(b) and by recording the approved parameters (if any) during the initial performance test.

d. Use of Oxidation Catalyst & CEMS [40 CFR Part 60 Subpart ZZZZ, Table 6]

i. The Permittee using a Continuous Emissions Monitoring System shall demonstrate initial compliance by conducting a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, appendix B and by continuously monitoring CO and either O₂ or CO₂ at both the inlet and outlet of the oxidation catalyst according to the requirements of 63.6625(a). The average reduction of CO calculated using 63.6620 shall equal or exceed the required percent reduction.

ii. Continuous compliance shall be met by collecting monitoring data according to 63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to 63.6630; and demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour period; and conducting an annual RATA of the CEMS using PS 3 and 4A of 4A of 40 CFR Part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, appendix F, procedure 1.

e. Non-Emergency 4SRB and Operated >24 hours per year

i. Use of NSCR

The Permittee using a non-selective catalytic reduction to reduce formaldehyde emissions shall demonstrate initial compliance of formaldehyde percent reduction by conducting an initial performance test and installing a CPMS to continuously monitor the catalyst inlet temperature according to the requirements in 63.6625(b) and by recording the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

ii. Without use of NSCR

The Permittee not using NSCR to reduce formaldehyde emissions shall demonstrate the formaldehyde percent reduction by conducting an initial performance test and installing Continuous Parameter Monitoring System to continuously monitor operating parameters (if any) approved by the Administrator and the Director according to the requirements in 63.6625(b) and by recording the approved parameters (if any) during the initial performance test.

- f. Non-Emergency CI RICE $300 < \text{HP} \leq 500$

The Permittee shall conduct an initial performance test to demonstrate compliance with the CO or formaldehyde emissions percent reduction or concentration limit, as applicable.

- g. The Permittee operating one of the following stationary RICE subject to work or management practices shall demonstrate continuous compliance by operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow 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:
 - i. Non-Emergency CI RICE ≤ 300 HP
 - ii. Non-Emergency 2 SLB
 - iii. Non-Emergency 4SLB and 4SRB RICE ≤ 500 HP
 - iv. Non-Emergency 4SLB and 4SRB RICE > 500 HP that operate less than 24 hours per calendar year.

C. Subsequent Performance Tests

[40 CFR 63.6612, Table 3 & 6 of 40 CFR subpart ZZZZ]

- 1. Non-Emergency CI RICE, 4SLB and 4SRB RICE > 500 HP And Not Limited Use

The Permittee shall conduct subsequent performance tests every 8760 hours or 3 years, whichever comes first, as specified in Table 3 of 40 CFR Part 63 subpart ZZZZ, for the following RICE subject to the emission limitations and operating limitations

- a. Non-emergency, CI stationary RICE with a brake horsepower > 500 horsepower that are operated more than 24 hours per calendar year and are not limited use stationary RICE and with or without use of oxidation catalyst or NSCR.
- b. Non-emergency, 4SLB and 4SRB stationary RICE with a brake horsepower > 500 that are operated more than 24 hours per calendar year that are not limited use stationary RICE and with or without use of oxidation catalyst or NSCR.

- 2. Non-Emergency CI RICE, 4SLB and 4SRB RICE > 500 HP – Limited Use

The Permittee shall conduct subsequent performance tests every 8760 hours or 5 years, whichever comes first, as specified in Table 3 of 40 CFR Part 63 subpart ZZZZ, for the following RICE subject to the emission limitations and operating limitations

- a. Existing non-emergency, CI stationary RICE with a brake horsepower > 500 hp that are limited use stationary RICE and with or without use of oxidation catalyst or NSCR.

- b. Existing non-emergency, 4SLB and 4SRB stationary RICE with a brake horsepower >500 that are operated more than 24 hours per calendar year that are limited use stationary RICE and with or without use of oxidation catalyst or NSCR.

D. Test Procedures

[40 CFR 63.6620]

1. The Permittee shall conduct each performance test in Table 3 and 4 of 40 CFR Part 63 subpart ZZZZ that is applicable.
2. If the stationary RICE subject to the testing requirement is non-operational, the Permittee is not required to start up the engine solely to conduct the performance test. The test shall be conducted when the engine is started up again.
3. The Permittee shall perform the test in accordance with procedures listed in 40 CFR Part 63.6620 (d) through (i).
4. If the Permittee is required to comply with the emission limitation to reduce CO or formaldehyde and is not using an oxidation catalyst or NSCR, the Permittee shall petition the Administrator and the Director for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The Permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator and the Director.
5. If the Permittee elects to petition the Administrator and the Director for approval of operating limitations, the petition shall include the information described in the following paragraphs VI.D.5.a through e of this Attachment:
 - a. Identification of the specific parameters you propose to use as operating limitations;
 - b. A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;
 - c. A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
 - d. A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
 - e. A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
6. If the Permittee submits a petition to the Administrator and the Director for approval of no operating limitations, the petition shall include the information described in paragraphs VI.D.6.a through g of this section.

- a. Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;
 - b. A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
 - c. For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;
 - d. For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;
 - e. For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;
 - f. For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
 - g. A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.
6. The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

E. Monitoring Requirements

[40 CFR 63.6625, 63.6635]

1. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the Permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
2. The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and

calculations used to report emission or operating levels. The Permittee shall, however, use all the valid data collected during all other periods.

3. Continuous Emissions Monitoring System (CEMS)

If the Permittee elects to install a CEMS as specified in Table 5 of 40 CFR Part 63 subpart ZZZZ, the Permittee shall install, operate, and maintain a CEMS to monitor CO and either oxygen or CO₂ at both the inlet and the outlet of the control device according to the following requirements in 40 CFR Part 63.6625(a).

4. Continuous Parameter Monitoring System (CPMS)

If the Permittee elects to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR Part 63 subpart ZZZZ, the CPMS shall be installed, operated, and maintained according to the requirements 40 CFR Part 63.6625(b).

5. Non-Emergency, CI RICE \geq 300 HP

If the Permittee operates an existing non-emergency, CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, the Permittee shall comply with either paragraph X.C.1 or paragraph X.C.2 of this section. The Permittee shall follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator and the Director to approve different maintenance requirements that are as protective as manufacturer requirements.

- i. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
- ii. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

6. Temperature Measurement

If the Permittee is subject to an operating limitation that requires the use of a temperature measurement device, the Permittee shall meet the requirements in paragraphs X.D.1 through 4 of this section.

- i. Locate the temperature sensor and other necessary equipment in a position that provides a representative temperature.
- ii. Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 1.0 percent of the temperature value, whichever is larger, for a noncryogenic temperature range.
- iii. Use a temperature sensor with a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit), or 2.5 percent of the temperature value, whichever is larger, for a cryogenic temperature range.

- iv. Conduct a temperature measurement device calibration check at least every 3 months.

7. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 63.6625, 63.6635. [A.A.C. R18-2-325]

G. Recordkeeping Requirements

[40 CFR 63.6655]

- 1. The Permittee required to comply with the emission and operating limitations, shall keep the records described in paragraphs VI.G.1.a through e, VI.G.2.a through c and VI.G.3 of this section.
 - a. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
 - b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
 - c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
 - d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - e. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- 2. For each CEMS or CPMS, you must keep the records listed in paragraphs VI.G1 through 3. of this section.
 - a. Records described in §63.10(b)(2)(vi) through (xi).
 - b. Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
 - c. Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.
- 3. The Permittee shall keep records required in Table 6 of 40 CFR subpart ZZZZ to show continuous compliance with each applicable emission or operating limitation.

VII. EMERGENCY ENGINES

A. Applicability

This section applies to each RICE that is identified as an Emergency Engine on the respective ATO.

B. Operating Requirements

[40 CFR 60.6640 (f)]

1. The Permittee operating any existing emergency stationary shall operate the emergency stationary RICE according to the requirements in paragraphs VII.B.1.a and VII.B.2.b of this section. If the engine is not operated according to the requirements in paragraphs VII.B.1.a and VII.B.2.b of this Condition, the engine will not be considered an emergency engine and shall meet all requirements for non-emergency engines.
 - a. The Permittee may operate the emergency RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of the engine is limited to no more than 100 hours per year. The Permittee may petition the Administrator and the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that the Federal, State, or local standards require maintenance and testing beyond 100 hours per year. Copies of records shall be made available to ADEQ upon request.
 - b. The Permittee may operate the emergency RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the Permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.
2. *The Permittee shall install a non-resettable hour meter if one is not already installed.*

[40 CFR 63.6625(f), R18-2-331.A.3.a]
[Material Permit Conditions are indicated by underline and italics]
3. The Permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first. If the Permittee prefers to extend the oil change requirement, an oil analysis program described in condition V.F. of this Attachment shall be completed.

4. The Permittee shall inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; [40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]
5. The Permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603(a); Table 2d of Subpart ZZZZ]

C. Recordkeeping Requirements

1. The Permittee shall keep records of the hours of operation of the CI RICE that is recorded through the non-resettable hour meter. Records shall include the date, start and stop times, hours spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 63.6655(f)]
2. The Permittee shall keep records of the parameters that are analyzed and the results of the oil analysis, if any, and the oil changes for the engine. [40 CFR 63.6625(i)]
3. The Permittee shall keep records of the maintenance conducted on the CI RICE that demonstrates operation and maintenance of the CI RICE in accordance with your maintenance plan. [40 CFR 63.6655(e)]
4. The Permittee operating an existing emergency stationary RICE that does not meet the standards applicable to non-emergency engine shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the Permittee shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655]
5. The Permittee operating an existing emergency RICE or an existing stationary RICE subject to management practices as shown in Table 2d of 40 CFR subpart ZZZZ, shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) were operated and maintained in accordance with the Permittee's maintenance plan. [40 CFR 63.6655]

D. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with 40 CFR Part 63.6603(a); 6605(b); 63.6625(f); 63.6655(e); 63.6655(f), Table 2d of 40 CFR subpart ZZZZ, 63.6655. [A.A.C. R18-2-325]

AIR QUALITY CONTROL

GENERAL PERMIT FOR GENERATORS

ATTACHMENT “G”: OTHER REQUIREMENTS

I. FUGITIVE DUST REQUIREMENTS

A. Applicability

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

B. Particulate Matter and Opacity

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

1. Emission Limitations and Standards

- a. Opacity of emissions from any non-point source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C. R18-2-614]
- b. The Permittee shall not cause, allow or permit visible emissions from any point source, in excess of 20 percent opacity. [A.A.C-R18-2-702.B]
- c. The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
 - i. 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]
 - ii. 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]
 - iii. 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]
 - iv. 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]

- v. 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]
- vi. 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]
- vii. 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]
- viii. Any other method as proposed by the Permittee and approved by the Administrator and the Director. [A.A.C. R18-2-306.A.3.c]

2. Monitoring and Recordkeeping Requirements

The Permittee shall maintain records of the dates on which any of the activities listed in Conditions I.B.1.c.i through I.B.1.c.viii above were performed and the control measures that were adopted. [A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-604.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]

II. MOBILE SOURCE REQUIREMENTS

A. Applicability

The requirements of this Section are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.90. [A.A.C.R18-2-801.A]

B. Particulate Matter and Opacity

1. Emission Limitations and Standards

a. Off-Road Machinery

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

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

- b. Roadway and Site Cleaning Machinery
 - i. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C.R18-2-804.A]
 - ii. The Permittee shall take reasonable precautions, such as the use of dust suppressants, before the cleaning of a site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means. [A.A.C. R18-2-804.B]
- c. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%. [A.A.C.R18-2-801.B]

2. Recordkeeping Requirement

The Permittee shall keep a record of all emissions related maintenance activities performed on the Permittee's mobile sources stationed at the facility as per manufacturer's specifications. [A.A.C.R18-2-306.A.5.a]

3. Permit Shield

Compliance with this Section shall be deemed compliance with A.A.C. R18-2-801, A.A.C. R18-2-802.A, A.A.C. R18-2-804.A and A.A.C. R18-2-804.B. [A.A.C.R18-2-325]

III. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

Particulate Matter and Opacity

1. Emission Limitations and Standards

- a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:
 - i. Wet blasting;
 - ii. Effective enclosures with necessary dust collecting equipment; or
 - iii. Any other method approved by the Administrator and the Director. [A.A.C. R18-2-726]
- b. Opacity

The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 20% opacity, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

2. Monitoring and Recordkeeping Requirement

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

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

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

3. Permit Shield

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

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

B. Use of Paints

1. Volatile Organic Compounds

- a. Emission Limitations and Standards

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

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

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

- ii. The Permittee 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]

- iii. For the purposes of Conditions III.B.1.a.ii(a) and III.B.1.a.ii(b), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions III.B.1.a.iii(a) through III.B.1.a.iii(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

- (a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of 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]

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

b. Monitoring and Recordkeeping Requirements

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

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

ii. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition III.B.1.b.i above. [A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with this Part shall be deemed compliance with A.A.C.R18-2-727 and SIP Provision R9-3-527.C. [A.A.C.R18-2-325]

2. Opacity

a. Emission Limitation and Standard

The Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 20% opacity, as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B]

b. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C.R18-2-702.B. [A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation and Standard

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

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

2. Monitoring and Recordkeeping Requirement

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

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

3. Permit Shield

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

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