

## CLASS I AIR QUALITY PERMIT

**DRAFT PERMIT No. 90384 (As Revised by SPR No. 97169)**

**PERMITTEE:** Arizona Public Service (APS)  
**FACILITY:** APS - Yucca Power Plant  
**PLACE ID:** 9955  
**DATE ISSUED:** **Date Pending**  
**EXPIRY DATE:** **Date Pending**

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### SUMMARY

This Class I air quality permit is issued to Arizona Public Service Company (APS), the Permittee, for the continued operation of the Yucca Power Plant. The facility is located at 7522 South Somerton Avenue, Yuma, Arizona. This permit renews and supersedes Permit No. 64502.

The Yucca Power Plant is jointly owned by APS and the Imperial Irrigation District. APS is the sole operator of the facility. The Yucca Power Plant provides power to the grid on an as-needed basis. The facility operates seven combustion turbines, one steam generating unit, and one auxiliary boiler, and has the capacity to generate 362 Megawatts. There is no air pollution control equipment installed on the steam generator or the older simple-cycle combustion turbines; however, combustion and post-combustion pollution controls for oxides of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO) are installed on the two newer simple-cycle combustion turbines. The Yucca Power Plant burns two types of fuel: natural gas and liquid fuel (fuel oil #2, #4, or #6). Natural gas is supplied by pipeline and fuel oil is delivered to the plant by railroad tank cars or trucks.

The Yucca Power Plant has the potential to emit more than 100 tons per year of sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter with an aerodynamic diameter less than 2.5 microns (PM<sub>2.5</sub>), and particulate matter with an aerodynamic diameter less than 10 microns (PM<sub>10</sub>), which makes this facility a major source pursuant to Arizona Administrative Code (A.A.C.) R18-2-101.75. The facility is also an affected source under Title IV of the Clean Air Act. Therefore, a Class I permit is required for this facility under A.A.C. R18-2-302.B.1.

This permit is issued in accordance with Arizona Revised Statutes (ARS) 49-426. It contains requirements from Title 18, Chapter 2 of the A.A.C. and Title 40 of the Code of Federal Regulations (CFR). All definitions, terms, and conditions used in this permit conform to those in the A.A.C. R18-2-101 et. seq. and Title 40 of the CFR, except as otherwise defined in this permit.

### **Significant Permit Revision (SPR) No. 97169**

This SPR authorizes APS, the Permittee, to install and operate 110 Tier 4 diesel engines each rated at 625 kilowatts (kW) at the Yucca Power Plant in order to assist with supplying power during peak periods. APS has accepted a 100-hour, 12-month rolling operating limit per engine.

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**Table of Contents**

**ATTACHMENT “A”: GENERAL PROVISIONS..... 5**

I. PERMIT EXPIRATION AND RENEWAL..... 5

II. COMPLIANCE WITH PERMIT CONDITIONS ..... 5

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR  
TERMINATION FOR CAUSE..... 5

IV. POSTING OF PERMIT ..... 6

V. FEE PAYMENT ..... 6

VI. EMISSIONS INVENTORY QUESTIONNAIRE ..... 6

VII. COMPLIANCE CERTIFICATION ..... 7

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS ..... 8

IX. INSPECTION AND ENTRY ..... 8

X. ACCIDENTAL RELEASE PROGRAM..... 8

XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING ..... 9

XII. RECORDKEEPING REQUIREMENTS ..... 15

XIII. REPORTING REQUIREMENTS ..... 15

XIV. DUTY TO PROVIDE INFORMATION..... 16

XV. PERMIT AMENDMENT OR REVISION..... 16

XVI. FACILITY CHANGE WITHOUT A PERMIT REVISION ..... 16

XVII. TESTING REQUIREMENTS ..... 18

XVIII. PROPERTY RIGHTS..... 20

XIX. SEVERABILITY CLAUSE ..... 20

XX. PERMIT SHIELD..... 20

XXI. PROTECTION OF STRATOSPHERIC OZONE ..... 21

XXII. APPLICABILITY OF NSPS/NESHAP GENERAL PROVISIONS ..... 21

**ATTACHMENT “B”: SPECIFIC CONDITIONS..... 22**

I. FACILITY-WIDE REQUIREMENTS..... 22

II. SIMPLE CYCLE COMBUSTION TURBINES AND STARTUP ENGINES ..... 24

III. STATIONARY COMPRESSION IGNITION RECIPROCATING INTERNAL COMBUSTION  
ENGINES ..... 38

IV. STEAM BOILER ..... 42

V. AUXILIARY BOILER (AUX BOILER) ..... 45

VI. COOLING TOWERS ..... 50

VII. FUEL OIL STORAGE TANKS ..... 52

VIII. FUGITIVE DUST REQUIREMENTS..... 52

IX. OTHER PERIODIC ACTIVITIES ..... 54

**ATTACHMENT “C”: EQUIPMENT LIST..... 59**

**ATTACHMENT “D”: PHASE II ACID RAIN PROVISIONS..... 61**

I. STATEMENT OF BASIS ..... 61

II. SO<sub>2</sub> ALLOWANCE<sup>†</sup> ALLOCATIONS AND NO<sub>x</sub> REQUIREMENTS FOR EACH AFFECTED  
UNIT ..... 61

III. PERMIT APPLICATION..... 61



**ATTACHMENT "A": GENERAL PROVISIONS**

**I. PERMIT EXPIRATION AND RENEWAL**

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

**II. COMPLIANCE WITH PERMIT CONDITIONS**

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

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

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

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

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

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **VI. EMISSIONS INVENTORY QUESTIONNAIRE**

- A. The Permittee shall complete and submit to the Director an emissions inventory questionnaire no later than June 1 of each year.

[A.A.C. R18-2-327.A.1.a]

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

[A.A.C. R18-2-327.A.3]

- C. The Permittee shall submit to the Director an amendment to an emissions inventory questionnaire, containing the documentation required by A.A.C. R18-2-327.A.3, whenever the Permittee discovers or receives notice, within two years of the original submittal, that incorrect or insufficient information was submitted to the Director by a previous emissions inventory questionnaire. The amendment shall be submitted to the Director within 30 days of discovery or receipt of notice. If the incorrect or insufficient information resulted in an incorrect annual emissions fee, the Director shall require that additional payment be made or shall apply an amount as a credit to a future annual emissions fee. The submittal of an amendment shall not subject the Permittee to an enforcement action or a civil or criminal penalty if the original submittal of incorrect or insufficient information was not due to willful neglect.

[A.A.C. R18-2-327.A.4]

## VII. COMPLIANCE CERTIFICATION

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

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

- B. The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;  
[A.A.C. R18-2-309.2.c.i]
2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period,  
[A.A.C. R18-2-309.2.c.ii]
3. Status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certifications shall identify each deviation (including any deviations reported pursuant to Condition XI.B of this Attachment) during the period covered by the certification and take it into account for consideration in the compliance certification;  
[A.A.C. R18-2-309.2.c.iii]
4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;  
[A.A.C. R18-2-309.2.c.iii]

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

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

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

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

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

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

### VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

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

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

### IX. INSPECTION AND ENTRY

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

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

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

- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;

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

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

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

- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and

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

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

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

### X. ACCIDENTAL RELEASE PROGRAM

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

[40 CFR Part 68]



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

**A. Excess Emissions Reporting**

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

1. Excess emissions shall be reported as follows:

a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

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

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

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

b. The report shall contain the following information:

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

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

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

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

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

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

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

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

(5) Nature and cause of such emissions;

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

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

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

- (7) Steps that were or are being taken to limit the excess emissions;  
and  
[A.A.C. R18-2-310.01.B.7]
- (8) If the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with any permit procedures governing source operation during periods of startup or malfunction.  
[A.A.C. R18-2-310.01.B.8]

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

**B. Permit Deviations Reporting**

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the applicable requirement contains a definition of prompt or otherwise specifies a timeframe for reporting deviations, that definition or timeframe shall govern. Where the applicable requirement does not address the timeframe for reporting deviations, the Permittee shall submit reports of deviations according to the following schedule:

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

**C. Emergency Provision**

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit,

due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

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

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

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

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

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

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

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

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

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

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

- d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

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

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

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

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

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

**D. Compliance Schedule**

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

[ARS § 49-426.I.3]

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

1. Applicability

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

- a. Promulgated pursuant to Sections 111 or 112 of the Act;  
[A.A.C. R18-2-310.A.1]
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;  
[A.A.C. R18-2-310.A.2]
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;  
[A.A.C. R18-2-310.A.3]
- d. Contained in A.A.C. R18-2-715.F; or  
[A.A.C. R18-2-310.A.4]
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.  
[A.A.C. R18-2-310.A.5]

2. Affirmative Defense for Malfunctions

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

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

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;  
[A.A.C. R18-2-310.B.1]
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;  
[A.A.C. R18-2-310.B.2]
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and

overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in Condition XI.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

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

- (1) The excess emissions could not have been prevented through careful and prudent planning and design;  
 [A.A.C. R18-2-310.C.1.a]
  - (2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;  
 [A.A.C. R18-2-310.C.1.b]
  - (3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;  
 [A.A.C. R18-2-310.C.1.c]
  - (4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;  
 [A.A.C. R18-2-310.C.1.d]
  - (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;  
 [A.A.C. R18-2-310.C.1.e]
  - (6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;  
 [A.A.C. R18-2-310.C.1.f]
  - (7) All emissions monitoring systems were kept in operation if at all practicable; and  
 [A.A.C. R18-2-310.C.1.g]
  - (8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.  
 [A.A.C. R18-2-310.C.1.h]
- b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XI.E.2 above.  
 [A.A.C. R18-2-310.C.2]
4. Affirmative Defense for Malfunctions during Scheduled Maintenance  
 If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XI.E.2 above.  
 [A.A.C. R18-2-310.D]
  5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XI.E.2 or XI.E.3, the Permittee shall demonstrate, through submission of the data and information required by this Condition XI.E and Condition XI.A.1 above, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

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

## **XII. RECORDKEEPING REQUIREMENTS**

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

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

1. The date, place as defined in the permit, and time of sampling or measurements;  
[A.A.C. R18-2-306.A.4.a.i]
2. The date(s) any analyses were performed;  
[A.A.C. R18-2-306.A.4.a.ii]
3. The name of the company or entity that performed the analyses;  
[A.A.C. R18-2-306.A.4.a.iii]
4. A description of the analytical techniques or methods used;  
[A.A.C. R18-2-306.A.4.a.iv]
5. The results of analyses; and  
[A.A.C. R18-2-306.A.4.a.v]
6. The operating conditions as existing at the time of sampling or measurement.  
[A.A.C. R18-2-306.A.4.a.vi]

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

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

## **XIII. REPORTING REQUIREMENTS**

The Permittee shall submit the following reports:

**A.** Compliance certifications in accordance with Section VII above.

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

**B.** Excess emission; permit deviation, and emergency reports in accordance with Section XI above.

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

**C.** Other reports required by any condition of Attachment "B".

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

**XIV. DUTY TO PROVIDE INFORMATION**

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

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

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

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

**XV. PERMIT AMENDMENT OR REVISION**

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

- A.** Administrative Permit Amendment;

[A.A.C. R18-2-318]

- B.** Minor Permit Revision; and

[A.A.C. R18-2-319]

- C.** Significant Permit Revision

[A.A.C. R18-2-320]

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

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

- A.** The Permittee may make changes that contravene an express permit term without a permit revision if all of the following apply:

1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(24);

[A.A.C. R18-2-317.A.1]

2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;

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

3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;



[A.A.C. R18-2-317.A.3]

4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A;

[A.A.C. R18-2-317.A.4]

5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements; and

[A.A.C. R18-2-317.A.5]

6. The changes do not constitute a minor NSR modification.

[A.A.C. R18-2-317.A.6]

- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVI.A, C, and D of this Attachment.

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

- C.** For each change under Conditions XVI.A and XVI.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.

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

- D.** Each notification shall include:

1. When the proposed change will occur;

[A.A.C. R18-2-317.E.1]

2. A description of the change;

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

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

[A.A.C. R18-2-317.E.3]

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

[A.A.C. R18-2-317.E.7]

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

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

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

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

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

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

## **XVII. TESTING REQUIREMENTS**

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

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

- B.** Operational Conditions during Performance Testing

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

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

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

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

- D.** Test Plan

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

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

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

- E.** Stack Sampling Facilities

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

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

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

**F. Interpretation of Final Results**

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

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

**G. Report of Final Test Results**

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

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

**H. Extension of Performance Test Deadline**

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

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

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

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

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

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

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

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

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

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

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

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

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

## **XVIII. PROPERTY RIGHTS**

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

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

## **XIX. SEVERABILITY CLAUSE**

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

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

## **XX. PERMIT SHIELD**

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled “Permit Shield”. The permit shield

shall not apply to minor revisions pursuant to Condition XV.B of this Attachment and any facility changes without a permit revision pursuant to Condition XVI of this Attachment.

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

**XXI. PROTECTION OF STRATOSPHERIC OZONE**

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

[40 CFR Part 82]

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

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

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

**ATTACHMENT “B”: SPECIFIC CONDITIONS**

**I. FACILITY-WIDE REQUIREMENTS**

**A. Opacity**

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

**a. Instantaneous Surveys**

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

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

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

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

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

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

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

**b. Six-Minute Observations**

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

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

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

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

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

**(2) EPA Reference Method 9.**

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

ALT-082 and any instantaneous visual survey required by this permit can be conducted as an instantaneous ALT-082 camera survey.

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

2. Monitoring, Recordkeeping, and Reporting Requirements

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

- a. At the frequency specified in the following sections of this permit, the Permittee shall conduct an instantaneous survey of visible emissions from both process stack sources, when in operation, and fugitive dust sources.
- b. If the visible emissions on an instantaneous basis appears less than or equal to the applicable opacity standard, then the Permittee shall keep a record of the name of the observer, the date on which the instantaneous survey was made, and the results of the instantaneous survey.
- c. If the visible emissions on an instantaneous basis appears greater than the applicable opacity standard, then the Permittee shall immediately conduct a six-minute observation of the visible emissions.
  - (1) If the six-minute observation of the visible emissions is less than or equal to the applicable opacity standard, then the Permittee shall record the name of the observer, the date on which the six-minute observation was made, and the results of the six-minute observation.
  - (2) If the six-minute observation of the visible emissions is greater than the applicable opacity standard, then the Permittee shall do the following:
    - (a) Adjust or repair the controls or equipment to reduce opacity to less than or equal to the opacity standard;
    - (b) Record the name of the observer, the date on which the six-minute observation was made, the results of the six-minute observation, and all corrective action taken; and
    - (c) Report the event as an excess emission for opacity in accordance with Condition XI.A of Attachment "A".
    - (d) Conduct another six-minute observation to document the effectiveness of the adjustments or repairs completed.

**B. Hazardous Air Pollutants**

1. Synthetic Minor Emission Limitation

Total combined emissions of HAPS for all emitting units shall not exceed 9 TPY for any individual HAP or 23.7 TPY total combined HAPs, calculated and recorded monthly as a 12-month rolling total.

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

[Material Permit Conditions are indicated by underline and italics]

**C. Reporting Requirements**

1. Deviations from the following Attachment “B” permit conditions shall be promptly reported in accordance with Condition XI.B.2 of Attachment “A”:  
[A.A.C. R18-2-306.A.5.b]
  - a. Condition II.D.3.b
  - b. Condition VIII.B.2
2. At the time the compliance certifications required by Section VII of Attachment “A” are submitted, the Permittee shall submit reports of all monitoring activities required by Attachment “B” performed during the six month compliance term.  
[A.A.C. R18-2-306.A.5.a]

**II. SIMPLE CYCLE COMBUSTION TURBINES AND STARTUP ENGINES**

**A. Applicability**

This Section applies to all Simple Cycle Combustion Turbines and Startup Engines in the Equipment List, Attachment “C”.

**B. Fuel Limitations**

1. The Permittee shall only combust the listed fuels in the following units:  
[A.A.C. R18-2-306.A.2]
  - a. Natural gas or fuel oil #2 or combination of natural gas and fuel oil #2 in Combustion Turbines CT1, CT2 and CT3;
  - b. Fuel oil #2 in Combustion Turbines CT4 and CT21 and Startup Engines CT1, CT2, & CT21;
  - c. Natural Gas in Combustion Turbines CT5 and CT6.
2. The sulfur content of fuel oil #2 is not to exceed 500ppm (0.05%) sulfur.  
[A.A.C. R18-2-306.01.A]

**C. Combustion Turbines and Startup Engines not subject to New Source Performance Standards (NSPS)**

1. Applicability



This Section applies to the following combustion turbines and startup engines marked as “No” in the “A.A.C. / NSPS / NESHAP” column in the Equipment List, Attachment “C”: CT1, CT2, CT3, CT4, CT21, CT1 Startup Engine, CT2 Startup Engine, and CT21 Startup Engine.

2. Particulate Matter and Opacity

a. Emission Limitation

- (1) The Permittee shall not emit or cause to be emitted into the atmosphere gases containing particulate matter in excess of the amount calculated by the following equation:

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

Where:

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

Q = the heat input in million Btu per hour.

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

- (2) For the purpose of this condition, “heat input” is defined as 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 on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

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

- (3) The Permittee shall not emit or cause to be emitted into the atmosphere gases exhibiting opacity greater than 40 percent for any period greater than 10 consecutive seconds. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.

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

b. Monitoring and Recordkeeping Requirements

- (1) The Permittee shall record daily the lower heating value of the fuel oil being fired in each simple cycle combustion turbine and each startup engine. The Permittee shall record daily the higher heating value of the natural gas being fired in each simple cycle combustion turbine.

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

- (2) Opacity Monitoring

The Permittee shall conduct a survey of visible emissions from each simple cycle combustion turbine and associated startup engine while operating at a normal representative working condition in accordance with Condition I.A. A minimum of one survey of visible emissions shall be conducted for every 80 hours of turbine operation on fuel oil, and every 720 hours of turbine operation on natural gas.

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

c. Permit Shield

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

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

3. Sulfur Dioxide (SO<sub>2</sub>)

a. Emission Limitation

(1) The Permittee shall not emit or cause to be emitted into the atmosphere any gases containing SO<sub>2</sub> in excess of 1.0 pound per million Btu heat input. The heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.

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

(2) The Permittee shall not burn high sulfur fuel oil in the simple cycle combustion turbine and the startup diesel engine. High sulfur fuel oil is defined as fuel oil with sulfur content equal to or exceeding 0.9 percent by weight.

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

b. Monitoring and Recordkeeping Requirements

(1) The Permittee shall record daily the sulfur content of the fuel (sulfur weight percent) being fired in each simple cycle combustion turbine and startup engine.

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

(2) The Permittee shall report to the Director any daily period during which the sulfur content of the fuel being fired in any simple cycle combustion turbine or startup engine exceeds 0.8 percent.

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

(3) The Permittee shall keep on record a copy of the fuel oil purchase specification sheet. This specification sheet shall include the sulfur content of the fuel oil (sulfur weight percent).

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

c. Testing Requirements

- (1) Within 180 days after the rolling twelve-month total of hours of operation on fuel oil exceeds the number listed in the table below, the Permittee shall conduct or cause to be conducted a performance test for SO<sub>2</sub>.

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

Combustion Turbine	Hours to Trigger Testing Using Fuel Oil
CT3	4,813
CT4	4,979

- (2) Performance testing using #2 fuel oil shall be conducted in accordance with EPA Reference Method 6 as described in 40 CFR 60, Appendix A.

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

- (3) To determine compliance with the sulfur limitation specified in Condition II.C.3.a(2) above, the Permittee shall use the ASTM Method D129-91 or use the most current Method D4294 for determining the sulfur content of fuel oil.

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

- (4) Only one performance test is required for each turbine per calendar year.

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

- (5) The Permittee shall provide the Director two weeks prior notice of the performance test.

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

d. Permit Shield

Compliance with the conditions of this part shall be deemed compliance with A.A.C..R18-2-719.B, F, H, I, & J and 719.K.1.

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

**D.** Combustion Turbines subject to NSPS

1. Applicability

This Section applies to the following combustion turbines marked as “NSPS Subpart KKKK” in the “A.A.C. / NSPS / NESHAP” column in the Equipment List, Attachment “C”: CT5 and CT6.

2. General Provisions

The following requirements apply to the operation, maintenance, and testing of combustion turbines and associated air pollution control and monitoring systems in accordance with 40 CFR Part 60, Subpart A– General Provisions. When used in the General Provisions, “Administrator” shall mean the Director of the Arizona Department of Environmental Quality.

- a. All requests, reports, applications, submittals, and other communications to the Director pursuant to A.A.C. R18-2-901, -902, and 40 CFR Part 60 shall be submitted in duplicate to the EPA Region 9 office at the following address:

Director, Air Division (Attn: AIR-1)  
EPA Region IX  
75 Hawthorne Street  
San Francisco, CA 94105

[A.A.C. R18-2-901, -902, and 40 CFR 60.4(a)]

- b. The Permittee shall comply with the general notification requirements contained in 40 CFR 60.7(a), including but not limited to:

- (1) Notification of the date of construction of each affected facility postmarked no later than 30 days after such date.
- (2) Notification of the actual date of initial startup of each affected facility postmarked within 15 days after such date.
- (3) Notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c) postmarked not less than 30 days prior to such date.

[A.A.C. R18-2-901(1) and 40 CFR 60.7(a)]

- c. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

[A.A.C. R18-2-901(1) and 40 CFR 60.7(b)]

- d. The Permittee shall submit excess emissions and monitoring systems performance reports and/or summary report forms on a semi-annual basis as required by 40 CFR 60.7(c) and (d).

[A.A.C. R18-2-901(1) and 40 CFR 60.7(c), (d), & (e)]

- e. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as provided in 40 CFR 60.7(f)(1) and (2).

[A.A.C. R18-2-901(1) and 40 CFR 60.7(f)]

- f. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate these

facilities including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[A.A.C. R18-2-901(1), 40 CFR 60.11(d), and 60.4333]

- g. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR Part 60, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[A.A.C. R18-2-901(1) and 40 CFR 60.11(g)]

- h. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission, which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[A.A.C. R18-2-901(1) and 40 CFR 60.12]

- i. The Permittee shall comply with the “General notification and reporting requirements” listed in 40 CFR 60.19.

[A.A.C. R18-2-901(1) and 40 CFR 60.19]

- j. “Unit operating hour” means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.

[40 CFR 60.4340]

- k. Permit Shield

Compliance with the conditions of this part shall be deemed compliance with 40 CFR 60.4333.

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

3. Nitrogen Oxides

- a. Emission Limitations/Standards

- (1) Synthetic Minor Emission Limitation

Total combined emissions of NO<sub>x</sub> from combustion turbines CT5 and CT6 shall not exceed 30.1 tons per year, calculated and recorded daily as a rolling 365-day sum.

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

[Material Permit Conditions are indicated by underline and italics]

(2) Emission Limit

The Permittee shall not cause to be discharged into the atmosphere from the stack of the combustion turbine any gases which contain NO<sub>x</sub> in excess of 25 parts per million by volume (ppmv) at 15 percent O<sub>2</sub>.

[40 CFR 60.4320(a) and Table 1 to 40 CFR 60 Subpart KKKK]

b. Air Pollution Control Equipment

At all times when combustion turbines are in operation, including periods of startup, shutdown, and malfunction, the Permittee shall to the extent practicable, maintain and operate the selective catalytic reduction systems in a manner consistent with good air pollution control practice for minimizing NO<sub>x</sub> emissions.

[A.A.C. R18-2-331.A.3.e, -901(1), and 40 CFR 60.11(d)]

[Material Permit Conditions are indicated by underline and italics]

c. Monitoring and Recordkeeping Requirements

(1) The Permittee shall certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO<sub>x</sub> monitor and a diluent gas (oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>)) monitor, to determine the hourly NO<sub>x</sub> emission rate in ppmv.

[A.A.C. R.18-2-331.A.3.c; 40 CFR 60.4340(b)(1) and 60.4035(b)]

[Material Permit Conditions are indicated by underline and italics]

(2) Each NO<sub>x</sub> diluent CEMS must be certified according to Appendix A to 40 CFR Part 75. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

[A.A.C. R18-2-331.A.3.c, 40 CFR 60.4340(b)(1) and 60.4345(a)]

[Material Permit Conditions are indicated by underline and italics]

(3) The Permittee shall certify, maintain, and continuously operate continuous monitoring systems for monitoring and recording fuel flow to combustion turbines.

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

[Material Permit Conditions are indicated by underline and italics]

(4) The fuel flow monitoring systems shall meet the requirements of Appendix D to 40 CFR Part 75.

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

(5) As specified in 40 CFR § 60.13(e)(2), during each full unit operating hour, both the NO<sub>x</sub> monitor and the diluent monitor

must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO<sub>x</sub> emission rate for the hour.

[40 CFR 60.4340(b)(1) and 60.4345(b)]

- (6) With respect to the CEMS described in Condition II.D.3.c(1) and (3), the Permittee shall implement the quality assurance (QA) program and plan described in Section 1 of Appendix B to 40 CFR Part 75.

[40 CFR 60.4340(b)(1)]

- (7) For purposes of identifying excess emissions:

- (a) All CEMS data shall be reduced to hourly averages as specified in 40 CFR § 60.13(h).

[40 CFR 60.4350(a)]

- (b) For each unit operating hour in which a valid hourly average, as described in Condition II.D.3.c(5), is obtained for both NO<sub>x</sub> and diluent monitors, the data acquisition and handling system must calculate and record the hourly NO<sub>x</sub> emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in Appendix A to 40 CFR Part 60. For any hour in which the hourly average O<sub>2</sub> concentration exceeds 19.0 percent O<sub>2</sub> (or the hourly average CO<sub>2</sub> concentration is less than 1.0 percent CO<sub>2</sub>), a diluent cap value of 19.0 percent O<sub>2</sub> or 1.0 percent CO<sub>2</sub> (as applicable) may be used in the emission calculations.

[40 CFR 60.4350(b)]

- (c) Correction of measured NO<sub>x</sub> concentrations to 15 percent O<sub>2</sub> is not allowed.

[40 CFR 60.4350(c)]

- (d) Only quality assured data from the CEMS shall be used to identify excess emissions. Periods where the missing data substitution procedures in Subpart D of 40 CFR Part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 CFR § 60.7(c).

[40 CFR 60.4350(d)]

(e) Calculate the hourly average NO<sub>x</sub> emission rates, in units of ppm.

[40 CFR 60.4350(f)]

(f) Use the calculated hourly average emission rates from Condition II.D.3.c(7)(e) to assess excess emissions on a 4-hour rolling average basis, as described in Condition II.D.3.d(2)(a).

[40 CFR 60.4350(g)]

(8) Annual NO<sub>x</sub> Emission Limit

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

*The Permittee shall certify, maintain, and continuously operate continuous emission monitoring systems (CEMS) for monitoring and recording NO<sub>x</sub> emissions to the atmosphere from combustion turbines.*

[A.A.C. R18-331.A.3.c]

[Material Permit Conditions are indicated by underline and italics]

(a) The NO<sub>x</sub> CEMS required by Condition II.D.3.c(1) shall be used as the NO<sub>x</sub> analyzers within the CEMS.

(b) The CEMS shall meet the requirements of Performance Specification 6, Specifications and Test Procedures for CEMS in Stationary Sources, in Appendix B to 40 CFR Part 60.

(c) The Permittee shall comply with the Quality Assurance/Quality Control Plan previously submitted and approved by the Director.

(d) In the event that the fuel flow data from the certified meters is not available, fuel flow data from a commercial billing fuel flow meter may be used to report the hourly fuel flow rate. When approved by the Director, this plan shall be implemented.

(e) The fuel flow monitoring systems shall meet the requirements of Appendix D to 40 CFR Part 75.

d. Reporting Requirements

(1) The Permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR § 60.7(c). Excess emissions shall be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

[40 CFR 60.4375(a)]



- (2) For the purpose of reports required under 40 CFR § 60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

[40 CFR 60.4380]

- (a) An excess emission is any unit operating period in which the 4-hour rolling average NO<sub>x</sub> emission rate exceeds the emission limit in Condition II.D.3.a(2). For the purposes of this permit term, a “4-hour rolling average NO<sub>x</sub> emission rate” is the arithmetic average of the average NO<sub>x</sub> emission rate in ppm measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NO<sub>x</sub> emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NO<sub>x</sub> emission rate is obtained for at least 3 of the 4 hours.

[40 CFR 60.4380(b)(1)]

- (b) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO<sub>x</sub> concentration, CO<sub>2</sub> or O<sub>2</sub> concentration.

[40 CFR 60.4380(b)(2)]

- (3) All reports required under 40 CFR § 60.7(c) must be postmarked by the 30<sup>th</sup> day following the end of each six-month period.

[40 CFR 60.4395]

e. Permit Shield

Compliance with the conditions of this part shall be deemed compliance with 40 CFR 60.4320, 60.4340(b)(1), 60.4335(b), 60.4345(a), (b), & (e), 60.4350(a), (b), (c), (d), (f), & (g), 60.4375(a), 60.4380(b)(1) & (2), 60.4395, and Table 1 to 40 CFR 60 Subpart KKKK.

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

4. Sulfur Dioxide

a. Emission Limitations/Standards

The Permittee shall not burn any fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub> per Joule (0.060 lb SO<sub>2</sub> per MMBtu) heat input.

[40 CFR 60.4330(a)(2)]

b. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee shall demonstrate that the fuel burned in combustion turbines does not exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. The Permittee shall use the fuel quality

characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the total sulfur content for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet.

[40 CFR 60.4365 and 60.4415(a)(1)]

c. Permit Shield

Compliance with conditions of this part shall be deemed compliance with 40 CFR 60.4330(a)(2), 60.4365(a), and 60.4415.

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

5. Carbon Monoxide

a. Emission Limitations/Standards

Synthetic Minor Emission Limitation

Total combined emissions of CO from combustion turbines CT5 and CT6 shall not exceed 91.8 tons per year, calculated and recorded daily as a rolling 365-day sum.

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

[Material Permit Conditions are indicated by underline and italics]

b. Air Pollution Control Equipment

At all times when combustion turbines are in operation, including periods of startup, shutdown, and malfunction, the Permittee shall to the extent practicable, maintain, and operate the oxidation catalyst systems in a manner consistent with good air pollution control practice for minimizing CO emissions.

[A.A.C. R18-2-331.A.3.e, -901(1), and 40 CFR 60.11(d)]

[Material Permit Conditions are indicated by underline and italics]

c. Monitoring, Recordkeeping, and Reporting Requirements

The Permittee shall certify, maintain, and continuously operate CEMS for monitoring and recording CO emissions to the atmosphere from the combustion turbines.

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

[Material Permit Conditions are indicated by underline and italics]

- (1) The CEMS shall meet the requirements of Performance Specification 4a, Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources, in Appendix B to 40 CFR Part 60.

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

- (2) The CEMS shall meet the requirements of Performance Specification 6, Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources, in Appendix B to 40 CFR Part 60.

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

6. Particulate Matter

a. Emission Limitations/Standards

*Total combined emissions of PM<sub>10</sub> from combustion turbines CT5 and CT6 shall not exceed 10.5 tons per year, calculated as a rolling 12-month sum.*

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

[Material Permit Conditions are indicated by underline and italics]

b. Monitoring, Recordkeeping, and Reporting Requirements

(1) The Permittee shall calculate and record hourly heat input rate in accordance with the procedures in Section 5.5 of Appendix F to 40 CFR Part 75.

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

(2) Within 10 days after the end of each calendar month, the Permittee shall calculate and record monthly the rolling 12-month PM<sub>10</sub> emissions from combustion turbines. The PM<sub>10</sub> emission rate shall be calculated as the product of the PM<sub>10</sub> emission factor determined in accordance with Condition II.D.6.c(3) and the heat input rate determined in accordance with Condition II.D.6.b(1).

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

c. Performance Testing

(1) For each combustion turbine, the Permittee shall perform, within the 5-year permit term, a performance test for PM<sub>10</sub> emissions.

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

(2) The performance test shall be performed using EPA Methods 5, 201 or 201A and EPA Method 202.

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

(3) The Permittee shall record and report the results of each performance test for PM<sub>10</sub> emissions in units of lb/MMBtu heat input.

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

(4) The Permittee shall provide the Director two weeks prior notice of the performance test.

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

7. Ammonia

a. Emission Standards

The Permittee shall not allow the emissions of ammonia (slippage) from each unit to exceed 10 ppmvd corrected to 15 percent O<sub>2</sub>.

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

b. Testing Requirements

The Permittee shall conduct performance tests for ammonia slippage using methods approved by the Director in the second year (2023) and fourth year (2025) of the permit term.

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

**E. National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ Requirements for Startup Engines**

1. Applicability

This Section applies to Startup Engines (ICEs) CT1, CT2, and CT21 installed for the sole purpose of startup of combustion turbines and listed in the Equipment List, Attachment "C".

[40 CFR 63.6590(a)(1)(iii) and 63.6675]

2. General Operating Requirements

a. The Permittee shall be in compliance with the applicable operating limitations at all times.

[40 CFR 63.6605(a)]

b. At all times the Permittee shall operate and maintain the internal combustion engines (ICEs), 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 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.

[40 CFR 63.6605(b)]

c. The Permittee shall minimize the ICE's time 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 Table 2d of 40 CFR 63, Subpart ZZZZ shall apply.

[40 CFR 63.6625(h)]

d. Except during periods of startup, the Permittee shall meet the following requirements for each black start engine:

- (1) 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 as described in Condition II.E.2.e shall be completed;
  - (2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - (3) 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 and 63.6625(i)]
- e. The Permittee may opt to utilize an oil analysis program in order to extend the oil change requirement specified in Condition II.E.2.d(1). The oil analysis shall be performed at the same frequency specified in Condition II.E.2.d(1).  
[40 CFR 63.6625(i)]
- (1) The analysis program shall at a minimum analyze the following three parameters:
    - (a) Total base number;
    - (b) Viscosity; and
    - (c) Percent water content.
  - (2) The condemning limits for these parameters are as follows:
    - (a) Total base number is less than 30 percent of the total base number when oil is new;
    - (b) Viscosity of the oil has changed by more than 20 percent from the viscosity of oil when new; and
    - (c) Percent water content by volume is greater than 0.5.
  - (3) If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee shall change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee shall change the oil within 2 business days or before commencing operation, whichever is later.
- f. The Permittee shall operate and maintain each black start engine according to manufacturer's emission-related written instructions or develop its own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner

consistent with good air pollution control practice for minimizing emissions.

[40 CFR 63.6625(e); Table 6, Item 9]

3. Reporting, Recordkeeping, and Notification Requirements

a. The Permittee shall keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

[40 CFR 63.6660(a)]

b. The Permittee shall keep each record for 5 years following the date of each occurrence, maintenance, corrective action, report, or record.

[40 CFR 63.6660(b)]

c. The Permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, maintenance, corrective action, report, or record.

[40 CFR 63.6660(c)]

d. If the Permittee elects to implement the oil analysis program described in Condition II.E.2.e, the Permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the engine.

[40 CFR 6625(i)]

4. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with 40 CFR 6590(a)(1)(iii); 6595(a)(1); 6603(a), 6605; 6625 (h), (i), & (e), 6660 (a), (b), & (c), and 6675.

[A.A.C. R-18-2-325]

**III. STATIONARY COMPRESSION IGNITION RECIPROCATING INTERNAL COMBUSTION ENGINES**

**A. Applicability**

This Section applies to the equipment identified in Attachment “C” as subject to NSPS 40 CFR 60 Subpart III for Stationary Compression Ignition (CI) Internal Combustion Engines.

The CI ICEs are leased by a third party. Thus, the facility’s responsibility for CI ICEs are limited to when they are onsite. In addition, all of the leased CI ICEs should be certified to tier IV emission standards.

**B. Fuel Requirements**

1. The Permittee shall use diesel fuel that meets the following requirements for non-road CI ICEs:

[40 CFR 60.4207(b) and 1090.305]

- a. Maximum sulfur content of 15 ppm;
- b. Cetane index or aromatic content, as follows:
  - (1) A minimum cetane index of 40; or
  - (2) A maximum aromatic content of 35 volume percent.

2. Recordkeeping Requirement

The Permittee shall keep records of fuel supplier certifications or other documentation to demonstrate compliance with Condition III.B.1. These records shall be made available to ADEQ upon request.

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

**C. Hours of Operation Limit**

1. *The Permittee shall not operate any CI ICE for more than 100 hours based on a 12-month rolling total.*

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

[Material Permit Conditions are indicated by underline and italics]

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall record the date, the starting time (in hours and minutes), and the stopping time (in hours and minutes) of each period of operation for each CI ICE.

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

- b. The Permittee shall maintain a record of operating hours and 12-month rolling totals for each CI ICE.

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

- c. The Permittee may use the hour meters associated with the CI ICEs to maintain records of the operating hours in lieu of Condition III.C.2.a above.

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

**D. Air Pollution Control Requirements**

On each CI ICE, the Permittee shall install, operate and maintain a selective catalytic reduction for the control of nitrogen oxides.

[A.A.C. R18-2-306.01.A, 331.A.3.d and -331.A.3.e]

[Material Permit Conditions are indicated by underlines and italics]

**E. Emission Limitations**

The Permittee shall comply with the following emission limitations for each of the CI ICEs:

[40 CFR 60.4201, 60.4204(b) and 1039.101]

- a. The Permittee shall not cause or permit the emission of carbon monoxide at rates greater than 3.5 grams per kilowatt-hour.
- b. The Permittee shall not cause or permit the emission of nitrogen oxides at rates greater than 0.67 grams per kilowatt-hour.
- c. The Permittee shall not cause or permit the emission of particulate matter at rates greater than 0.03 grams per kilowatt-hour.
- d. The Permittee shall not cause or permit the emission of volatile organic compounds at rates greater than 0.19 grams per kilowatt-hour.

**F. Operation and Maintenance Requirements**

1. The Permittee shall operate and maintain the CI ICEs to achieve the emission standards required in Condition III.E above over the entire life of the CI ICEs.
2. If a CI ICE is equipped with a diesel particulate filter to comply with the emission standards in Condition III.E, the Permittee shall install the diesel particulate filter with a backpressure monitor that notifies the facility when the high backpressure limit of the CI ICE is approached.

[40 CFR 60.4209(b), A.A.C. R18-2-331.A.3.c]

[Material permit conditions are indicated by underlines and italics]

3. The Permittee shall do all of the following:

[40 CFR 60.4211(a)]

- a. Operate and maintain the CI ICEs and control devices according to the manufacturer's emission-related written instructions;
- b. Change only those emission-related settings that are permitted by the manufacturer; and

[40 CFR 60.4211(a)(2)]

- c. Meet the requirements of 40 CFR Part 1068, as they apply.



[40 CFR 60.4211(a)(3)]

4. The Permittee shall comply by purchasing CI ICEs certified to the emission standards in Condition III.E, as applicable, for the same model year and maximum power. The CI ICEs must be installed and configured according to the manufacturer's emission-related specifications.

[40 CFR 60.4211(c)]

5. The Permittee shall install and configure the non-emergency CI ICEs according to the manufacturer's emission-related specifications, except as permitted under Condition III.F.5.a below:

[40 CFR 60.4211(c)]

- a. If the Permittee does not install, configure, operate, and maintain the non-emergency CI ICEs according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as indicated in Condition III.F.5.b below.

[40 CFR 60.4211(g)]

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

[40 CFR 60.4211(g)(3)]

- c. If the Permittee demonstrates compliance according to Condition III.F.5.b above, the Permittee shall conduct performance tests that follow the procedures in 40 CFR 60.4212.

[40 CFR 60.4212]

**G. Monitoring, Recordkeeping and Reporting Requirements**

1. For CI ICEs that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year CI ICEs that are greater than 130 KW (175 HP) and not certified, the Permittee shall keep records of the following:
  - a. All notifications submitted to comply with 40 CFR Part 60 Subpart III and documentation supporting any notification;  
[40 CFR 60.4214(a)(2)(i)]
  - b. Maintenance conducted on the CI ICEs;  
[40 CFR 60.4214(a)(2)(ii)]
  - c. If the CI ICE is a certified CI ICE, documentation from the manufacturer that the CI ICE is certified to meet the emission standards;  
[40 CFR 60.4214(a)(2)(iii)]
  - d. If the CI ICE is not a certified CI ICE, documentation that the CI ICE meets the emission standards.  
[40 CFR 60.4214(a)(2)(iv)]
  - e. If the CI ICE is equipped with a diesel particulate filter, the Permittee shall keep records of any corrective action taken after the backpressure monitor has notified the facility that the high backpressure limit of the CI ICE is approached.  
[40 CFR 60.4214(c)]

**H. Permit Shield**

Compliance with requirements of Condition III above shall be deemed compliance with 40 CFR 60.4201, 4204(b), 4207(b), 4209(b), 4211(a), (c) and (g), 4212, 4214(a) and (c), 1039.101 and 1090.305.

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

**IV. STEAM BOILER**

**A. Applicability**

This Section applies to the Steam Boiler listed in the Equipment List, Attachment "C".

**B. Fuel Limitation**

The Permittee shall combust only natural gas or fuel oils #4 to #6 in the Steam Boiler.

[A.A.C. R-18-2-306.A.2]

**C. Particulate Matter and Opacity**

1. Emission Limitation

- a. The Permittee shall not emit or cause to be emitted into the atmosphere particulate matter in excess of the amount calculated by the following equation:

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

Where:

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

Q = the heat input in million Btu per hour.

[A.A.C. R18-2-703.C.1]

- b. For the purpose of this condition, “heat input” is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.

[A.A.C. R18-2-703.B]

- c. The Permittee shall not emit or cause to be emitted into the atmosphere gases exhibiting opacity greater than 20 percent.

[A.A.C. R18-2-702.B.1]

- d. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement, the exceedance shall not constitute a violation of the applicable opacity limit.

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

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall record daily the lower heating value of the fuel oil being fired in the Steam Boiler.

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

- b. Opacity Monitoring

The Permittee shall conduct a survey of visible emissions from the stack of the Steam Boiler while operating at a normal representative working condition in accordance with Condition I.A. A minimum of one survey of visible emissions shall be conducted for every 80 hours of firing fuel oil in the Steam Boiler and every 720 hours of firing natural gas in the Steam Boiler.

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

3. Performance Testing

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

- a. Within 180 days after the rolling twelve-month total of hours of operation on fuel oil exceed 2,763 hours, the Permittee shall conduct or cause to be conducted a performance test for particulate matter less than 10 microns (PM<sub>10</sub>) on the Steam Boiler.
- b. Performance tests for PM<sub>10</sub> shall be conducted in accordance with EPA Reference Method 5 or Method 201/202 as described in 40 CFR 60, Appendix A. The performance test shall be conducted using #6 fuel oil.
- c. Only one performance test is required per calendar year.
- d. The Permittee shall provide the Director two weeks prior notice of the performance test.

4. Permit Shield

Compliance with the conditions of this part shall be deemed compliance with A.A.C. R18-2-702.B.1 and 703.B & C.1.

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

**D. Sulfur Dioxide**

1. Emission Limitations/Standards

- a. The Permittee shall not emit or cause to be emitted into the atmosphere any gases containing SO<sub>2</sub> in excess of 1.0 pound per million Btu heat input on a three-hour average. The heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.  

[A.A.C. R18-2-703.B and E.1]
- b. The Permittee shall not burn high sulfur fuel oil in the Steam Boiler. High sulfur fuel oil is defined as fuel oil with sulfur content equal to or exceeding 0.9 percent by weight.  

[A.A.C. R18-2-703.H]

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall record daily the sulfur content of the fuel (sulfur weight percent) being fired in the Steam Boiler.  

[A.A.C. R18-2-306.A.3.c]
- b. The Permittee shall keep on record a copy of the fuel oil purchase specification sheet. This specification sheet shall include:  

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

- (1) The sulfur content of the fuel oil (sulfur weight percent);

(2) The method used to determine the sulfur content of the fuel oil.

3. Permit Shield

Compliance with the conditions of this part shall be deemed compliance with A.A.C. R18-2-703.B, E.1 and H

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

**V. AUXILIARY BOILER (AUX BOILER)**

**A. Existing Source Requirements**

1. Applicability

This Section applies to the Auxiliary Boiler listed in the Equipment List, Attachment “C”.

2. Fuel Limitation

The Permittee shall combust only natural gas or fuel oil #6 in the Aux Boiler.

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

3. Particulate Matter and Opacity

a. Emission Limitation

(1) The Permittee shall not emit or cause to be emitted into the atmosphere particulate matter in excess of the amount calculated by the following equation:

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

Where:

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

Q = the heat input in million Btu per hour.

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

(2) For the purpose of this condition, “heat input” is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.

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

(3) The Permittee shall not emit or cause to be emitted into the atmosphere gases exhibiting opacity greater than 15 percent.

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

b. Monitoring and Recordkeeping Requirements

- (1) The Permittee shall record daily the lower heating value of the fuel oil being fired in the Aux Boiler.

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

- (2) Opacity Monitoring

The Permittee shall conduct a survey of visible emissions from the stack of the Aux Boiler while operating at a normal representative working condition in accordance with Condition I.A. A minimum of one survey of visible emissions shall be conducted for every 80 hours of firing fuel oil in the Aux Boiler and every 720 hours of firing natural gas in the Aux Boiler.

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

c. Performance Testing

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

- (1) Within 1 year of re-start of operation of Aux Boiler, the Permittee shall conduct or cause to be conducted a performance test for PM<sub>10</sub>.
- (2) Performance tests for PM<sub>10</sub> shall be conducted in accordance with EPA Reference Method 5 or Method 201/202 as described in 40 CFR 60, Appendix A. The performance test shall be conducted using #6 fuel oil.
- (3) The Permittee shall provide the Director two weeks prior notice of the performance test.

d. Permit Shield

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

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

4. Sulfur Dioxide

a. Emission Limitations/Standards

- (1) The Permittee shall not emit or cause to be emitted into the atmosphere any gases containing sulfur dioxide in excess of 1.0 pound per million Btu heat input. The heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.

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

- (2) The Permittee shall not burn high sulfur fuel oil in the Aux Boiler. High sulfur fuel oil is defined as fuel oil with sulfur content equal to or exceeding 0.9 percent by weight.

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

b. Monitoring and Recordkeeping Requirements

- (1) The Permittee shall record daily the sulfur content of the fuel (sulfur weight percent) being fired in the Aux Boiler.

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

- (2) The Permittee shall keep on record a copy of the fuel oil purchase specification sheet. This specification sheet shall include:

- (a) The sulfur content of the fuel oil (sulfur weight percent);
- (b) The method used to determine the sulfur content of the fuel oil.

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

c. Permit Shield

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

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

**B. National Emissions Standards for Hazardous Air Pollutants Requirements, Subpart JJJJJ**

1. Applicability

The requirements of this part are applicable to the Aux Boiler listed in the Equipment List, Attachment “C”. The Aux Boiler has not been in operation since 1985. The requirements of this part will be applicable no later than 120 days after resuming operation.

2. Operating Requirements

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

[40 CFR 63.11205(a)]

b. Work-Practice Standard

[40 CFR 63.11201(b) and Table 2 to 40 CFR 63 Subpart JJJJJ]

- (1) Initial Tune-up

The Permittee operating the Aux Boiler shall conduct a tune-up of the boiler according to the procedures stated in Condition V.B.2.c no later than March 21, 2012 and according to the applicable provisions in 63.7(a)(2). At the time the tune-up is performed, the permittee must submit a signed statement in the Notification of Compliance Status report that indicates that an initial tune-up of the boiler was conducted.

[40 CFR 63.11210(c) and 11214(b)]

(2) Subsequent Tune-ups

Subsequent tune-ups shall be conducted every two years and shall be conducted no more than 25 months after the previous tune-up. The tune-up must be conducted using the fuel(s) that provided the majority of the heat input to the boiler over the 12 months prior to the tune up.

[40 CFR 63.11223(a) and (b)]

c. Tune-up Procedures

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

[40 CFR 63.11223(b)]

- (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (this inspection may be delayed until the next scheduled unit shutdown, but the burner must be inspected at least once every 36 months).
- (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (this inspection may be delayed until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).
- (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available.
- (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.



- (6) Maintain onsite and submit, if requested by the Administrator or Director, biennial report containing the information in the following conditions:
  - (a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
  - (b) A description of any corrective actions taken as a part of the tune-up of the boiler.
  - (c) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler.
- (7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

d. Notification, Reporting and Recordkeeping Requirements

- (1) The Permittee shall keep the following records to document continuous compliance conformance with the tune up requirements:
  - (a) Records shall identify each boiler, the date of tune-up, the procedures followed for the tune-up, and the manufacturer's specifications to which the boiler was tuned.  

[40 CFR 63.11225(c)(2)(i)]
  - (b) Records shall document the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.  

[40 CFR 63.11225(c)(2)(iv)]
  - (c) Records of occurrence, duration, and corrective action taken for each malfunction of the boiler.  

[40 CFR 63.11225(c)(4) and (5)]
- (2) The Permittee shall submit a compliance certification report every two years by March 15th, which consists of the following:
 

[40 CFR 63.11225(b)]

  - (a) Company name and address.
  - (b) Statement by a responsible official, with the official's name, title, phone number, email address, and signature,

certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance and signature by a responsible official:

- (i) “This facility complies with the requirements in § 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.”
- (ii) “This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.”

3. Permit Shield

Compliance with this Part shall be deemed compliance 40 CFR 63.11194, 11196(a)(1), 11205(a), 11201(b), 11205(a), 11210(c), 11214(b), 11223(a) & (b), 11225(a)(2), (a)(4), (b), (c)(2)(i), (c)(2)(iv), (c)(4), and (c)(5).

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

**VI. COOLING TOWERS**

**A. Applicability**

This Section applies to the cooling towers listed in the Equipment List, Attachment “C”.

**B. Particulate Matter and Opacity**

1. Emission Limitation

- a. The Permittee shall not emit or cause to be emitted into the atmosphere particulate matter in excess of the amount calculated by the following equation:

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

Where:

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

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

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

- b. The Permittee shall not cause, allow or permit to be emitted into the atmosphere any plume or effluent the opacity of which exceeds 20 percent.

[A.A.C. R18-2-702.B.1]

- c. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement, the exceedance shall not constitute a violation of the applicable opacity limit.

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

2. Monitoring and Recordkeeping Requirements

- a. The Permittee shall conduct a survey of visible emissions from each cooling tower while operating at a normal representative working condition in accordance with Condition I.A. A minimum of one survey of visible emissions shall be conducted for every 80 hours of turbine operation on fuel oil, and every 720 hours of turbine operation on natural gas.

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

- b. The Permittee shall perform monthly inspections of the drift eliminators to verify their performance. The Permittee shall keep records of the results of the inspections and any repairs performed in a written facility log.

[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. R18-2-702.B.1& C and 730.A.1.

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

C. Operating Requirements

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

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

2. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee to a degree that will adequately dilute, reduce or eliminate the discharge of air pollution to adjoining property.

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

3. Permit Shield

Compliance with this part shall be deemed compliance with A.A.C. R18-2-730.D and G.

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

**VII. FUEL OIL STORAGE TANKS**

**A. Applicability**

This Section applies to the fuel oil storage tanks listed in the Equipment List, Attachment "C".

**B. Emission Limitations**

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

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

2. Where a stack, vent, or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee to a degree that will adequately dilute, reduce, or eliminate the discharge of air pollution to adjoining property.

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

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

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

**C. Permit Shield**

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

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

**VIII. FUGITIVE DUST REQUIREMENTS**

**A. Applicability**

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

**B. Particulate Matter and Opacity**

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

1. Emission Limitations and Standards

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

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

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

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

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

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

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

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

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

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

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

- (5) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust;

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

- (6) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored;  
 [A.A.C. R18-2-607.A]
- (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents;  
 [A.A.C. R18-2-607.B]
- (8) Any other method as proposed by the Permittee and approved by the Director.  
 [A.A.C. R18-2-306.A.3.c]

2. Air Pollution Control Requirements

Unpaved Roads and Storage Piles

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

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

[Material Permit Condition is indicated by underline and italics]

3. Monitoring and Recordkeeping Requirements

- a. The Permittee shall maintain records of the dates on which any of the activities listed in Condition VIII.B.1.b above were performed and the control measures that were adopted.

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

- b. Opacity Monitoring Requirements

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

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

C. Permit Shield

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

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

**IX. OTHER PERIODIC ACTIVITIES**

**A. Abrasive Blasting**

1. Particulate Matter and Opacity

- a. Emission Limitations/Standards

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

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

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

b. Opacity

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

[A.A.C. R18-2-702.B.1]

2. Monitoring and Recordkeeping Requirement

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

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

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

3. Permit Shield

Compliance with Condition IX.A.1 shall be deemed compliance with A.A.C. R18-2-702.B.1 and -726.

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

**B.** Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

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

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and

spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.  
[A.A.C. R18-2-727.A]

(2) The Permittee or their designated contractor shall not either:  
[A.A.C. R18-2-727.B]

(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.

(3) For the purposes of Condition IX.A.1.a(2), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions (a) thru (c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:  
[A.A.C. R18-2-727.C]

(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.

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

b. Monitoring and Recordkeeping Requirements

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

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

(a) The date the project was conducted;



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

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

c. Permit Shield

Compliance with Condition IX.B.1.a shall be deemed compliance with A.A.C.R18-2-727.

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

2. Opacity

a. Emission Limitation/Standard

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

[A.A.C. R18-2-702.B.1]

b. Permit Shield

Compliance with Condition IX.B.2.a shall be deemed compliance with A.A.C.R18-2-702.B.1.

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

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

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

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

2. Monitoring and Recordkeeping Requirements

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 Condition IX.C.1 shall be deemed compliance with A.A.C.  
R18-2-1101.A.12.

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

ATTACHMENT “C”: EQUIPMENT LIST

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	INSTALLATION/ MFG. DATE	EQUIPMENT ID NUMBER	A.A.C. / NSPS / NESHAP
Steam Boiler	80 MW	Combustion Engineering		188895	3/4/1959	Unit 1	A.A.C. R18-2-703
Simple Cycle Combustion Turbine	22 MW	General Electric	Frame 5	214363	7/1/1971	CT1	A.A.C. R18-2-719
Simple Cycle Combustion Turbine	22 MW	General Electric	Frame 5	214362	7/1/1971	CT2	A.A.C. R18-2-719
Simple Cycle Combustion Turbine	60 MW	General Electric	Frame 7	217812	6/20/1973	CT3	A.A.C. R18-2-719
Simple Cycle Combustion Turbine	58 MW	General Electric	Frame 7	237986	7/9/1974	CT4	A.A.C. R18-2-719
Simple Cycle Combustion Turbine	49 MW	General Electric	LM 6000	191607	5/18/2008	CT5	NSPS Subpart KKKK
Simple Cycle Combustion Turbine	49 MW	General Electric	LM 6000	191608	5/18/2008	CT6	NSPS Subpart KKKK
Simple Cycle Combustion Turbine	21.6 MW	General Electric	Frame 5	245107	12/18/1978	CT21	A.A.C. R18-2-719
Startup Engine	500 HP	O’Donell-Quigley	7123-7000	12VA24361	7/1/1971	CT1 Startup Engine	NESHAP Subpart ZZZZ
Startup Engine	500 HP	O’Donell-Quigley	7123-7000	12VA24360	7/1/1971	CT2 Startup Engine	NESHAP Subpart ZZZZ
Startup Engine	500 HP	Massaro Detroit Allison	7123-7000	12VA05831	7/1/1971	CT21 Startup Engine	NESHAP Subpart ZZZZ
110 Mobile Engines (Tier 4)	625 kW	Volvo	PowerBlock Mobile 1250 kW	TBD	2021	Generators 1 to 110	NSPS Subpart III
Auxiliary Boiler	71.2 MMBtu/hr	Cleaver-Brooks	DL-68-400	7869	1974	Aux Boiler	NESHAP Subpart JJJJJ

<b>EQUIPMENT TYPE</b>	<b>MAX. CAPACITY</b>	<b>MAKE</b>	<b>MODEL</b>	<b>SERIAL NUMBER</b>	<b>INSTALLATION/ MFG. DATE</b>	<b>EQUIPMENT ID NUMBER</b>	<b>A.A.C. / NSPS / NESHAP</b>
Steamer Cooling Tower	40,000 Gallons/min	Foster Wheeler	Marley Class F400	F442A42A5.004A	2012	Steamer Tower	A.A.C. R18-2-730
CT5 Cooling Tower	3,823 Gallons/min	Evapco	AT214-0548	7-326448	2007	CT5	A.A.C. R18-2-730
CT6 Cooling Tower	3,823 Gallons/min	Evapco	AT214-0548	7-326448	2007	CT6	A.A.C. R18-2-730
Fuel Oil Storage Tank	100,000 bbl	NA	NA	NA	1973	Tank 1	A.A.C. R18-2-730
Fuel Oil Storage Tank	30,000 bbl	NA	NA	NA	1971	Tank 2	A.A.C. R18-2-730
Fuel Oil Storage Tank	6,000 bbl	NA	NA	NA	1971	Tank 3	A.A.C. R18-2-730

**ATTACHMENT “D”: PHASE II ACID RAIN PROVISIONS**

**AIR QUALITY CONTROL PERMIT NO. 90384  
FOR  
APS – YUCCA POWER PLANT**

**I. STATEMENT OF BASIS**

Statutory and Regulatory Authorities: In accordance with Arizona Revised Statutes, Title 49, Chapter 3, Article 2, Section 426.N, and Titles IV and V of the Clean Air Act, the Arizona Department of Environmental Quality issues this Phase II Acid Rain Permit pursuant to Arizona Administrative Code, Title 18, Chapter 2, Article 3, Section 333 (A.A.C. R18-2-333), “Acid Rain”.

**II. SO<sub>2</sub> ALLOWANCE<sup>†</sup> ALLOCATIONS AND NO<sub>x</sub> REQUIREMENTS FOR EACH AFFECTED UNIT**

- A. The Permittee shall comply with the Acid Rain Permit and 40 CFR Parts 72, 73, and 75.
- B. The Permittee shall hold SO<sub>2</sub> Allowances as of the allowance transfer deadline in the Steam Boiler Unit 1 compliance sub-account not less than the total annual actual emissions of SO<sub>2</sub> from the Steam Boiler Unit1 for the previous calendar year as required by the Acid Rain Program.
- C. The SO<sub>2</sub> Allowance Allocations and NO<sub>x</sub> Requirements for the Steam Boiler Unit 1 are as follows:

Affected Unit	Pollutant	Years 2000-2009	Years 2010 and Beyond
Steam Boiler Unit 1	SO <sub>2</sub> allowances under Table 2 of 40 CFR Part 73	42	40
	NO <sub>x</sub> emission limit	This unit is not subject to a NO <sub>x</sub> emission limit under 40 CFR Part 76.	

<sup>†</sup> As defined under 40 CFR §72.2, “Allowance” means an authorization by the Administrator under the Acid Rain Program to emit up to one ton of sulfur dioxide during or after a specified calendar year.

**III. PERMIT APPLICATION**

The Permittee, and any other owners or operators of the units at this facility, shall comply with the requirements contained in the Acid Rain Permit Application (Phase II Permit Application and Certificate of Representation) signed by the Designated Representative David Evans on August 2, 2021.

[40 CFR Parts 72, 73, and 75]