

**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR PROGRAM**

**33 N. Stone Avenue, Suite 700 • Tucson, Arizona 85701 • Phone: (520) 724-7400**

**AIR QUALITY PERMIT**

(As required by Title 17.12, Article II, Pima County Code)

**ISSUED TO**

**TUCSON ELECTRIC POWER COMPANY  
DEMOSS-PETRIE GENERATING STATION  
INTERSTATE 10 & GRANT ROAD  
TUCSON, AZ 85705**

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

**THIS PERMIT ISSUED SUBJECT TO THE SPECIFIC AND GENERAL CONDITIONS  
IDENTIFIED IN THIS PERMIT**

PERMIT NUMBER 910

PERMIT CLASS I

ISSUED: July 18, 2019

EXPIRES: July 17, 2024

  
SIGNATURE

Rupesh Patel, Air Program Manager, PDEQ  
TITLE

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**SUMMARY**

This air quality permit is issued to Tucson Electric Power Company – DeMoss-Petrie Generating Station, (TEP-DMP) the Permittee. This facility is a *major source of NO<sub>x</sub> and CO, a minor source of Hazardous Air Pollutants (HAPs), and a true minor source of all other criteria pollutants. The facility is a major GHG emitting source based on its potential to emit (PTE) more than 100,000 tpy of CO<sub>2e</sub>. There are no regulations or limits for GHG emitting facilities as EPA have not promulgated any for this source classification.* The facility is a stationary source as defined by Title 17 of the Pima County Code, Title 49 of the Arizona Revised Statutes, and the Clean Air Act.

The facility consists of a natural gas-fired simple cycle gas turbine generator and ancillary equipment. The unit serves as a “peaking” generator used to supply power and voltage stabilization at times of peak customer demand. The unit is a natural gas fired General Electric, Model MS7001EA with a nameplate capacity of 85 MWe and is equipped with dry low-NO<sub>x</sub> combustors designed to reduce oxides of nitrogen below the New Source Performance Standards (NSPS) for Stationary Gas Turbines (40 CFR 60 – Subpart GG). The unit is an affected source under Title IV of the Clean Air Act.

The unit is located within an area that is classified as attainment for all criteria pollutants. TEP has voluntarily elected to limit the operation of this source as necessary to curtail emissions of NO<sub>x</sub> and CO to levels below the Prevention of Significant Deterioration (PSD) threshold of 250 tons per year for each pollutant. Emissions of NO<sub>x</sub> and CO are monitored by continuous emissions monitoring systems (CEMS).

The following emission rates are for reference purposes only and are used to establish whether or not the source is a major source in terms of the Title V permit program. They are not intended to be enforced by direct measurement unless otherwise noted in Part B of this permit. The estimates are a result of information submitted in the renewal application submitted November 30, 2018, and the determinations contained in the technical support document (TSD).

<b>Pollutant</b>	<b>Tons per Year</b>
Nitrogen Oxides (NO <sub>x</sub> )	< 250
Carbon Monoxide (CO)	< 250
Green House Gas (CO <sub>2e</sub> )	433,059
Particulate Matter (as PM <sub>10</sub> )	25.7
Volatile Organic Compounds (VOC)	8.2
Sulfur Oxides (SO <sub>x</sub> )	8.2
Hazardous Air Pollutants (HAPs)	4.0
Lead	Negligible

**All terms and conditions of this permit are federally enforceable by the Administrator of the United States Environmental Protection Agency (U.S.EPA) under the Clean Air Act, except as otherwise noted.**

## **PART A: GENERAL CONDITIONS**

*(Unless otherwise noted, References to A.R.S. are references to the Arizona Revised Statutes, references to A.A.C. are references to the Arizona Administrative Code, references to PCC are references to Title 17 of the Pima County Code, and references to SIP are references to the Pima County State Implementation Plan. Underlined text are hyperlinks within the permit or to external websites referencing the provision.)*

### **1. Permit Expiration and Renewal**

[PCC 17.11.090.A and PCC 17.12.010.D.1]

- a. This permit is valid for a period of five years from the date of issuance of the permit.
- b. The Permittee shall submit an application for renewal of this permit at least 6 months, but not greater than 18 months prior to the date of permit expiration.

### **2. Compliance with Permit Conditions**

[PCC 17.12.040.A.8.a & b]

- a. The Permittee shall comply with all Conditions of this permit including all applicable requirements of Arizona air quality statutes A.R.S. Title 49, Chapter 3, and Pima County air quality rules. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or 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.
- 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.

### **3. Permit Revision, Reopening, Revocation and Reissuance, Or Termination For Cause**

[PCC 17.12.040.A.8.c & PCC 17.12.130]

- 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, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit Condition.
- b. The permit shall be reopened and revised under any of the following circumstances:
  - i. Additional applicable requirements under the Clean Air Act become applicable to a major source with a remaining permit term of three or more years. Such a 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 PCC 17.12.140.B. Any permit reopening required in accordance with this paragraph shall comply with provisions in PCC 17.12.140 for permit renewal and shall reset the five-year permit term.
  - ii. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Control Officer, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.
  - iii. The Control Officer 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.
  - iv. The Control Officer or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

- 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 affect only those parts of the permit for which cause to reopen exists. Such reopenings shall, except for reopenings under Condition 3.b.i above, affect only those parts of the permit for which cause to reopen exist. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition 3.b.i above shall not result in the resetting of the five-year permit term.

#### **4. Posting of Permit**

[PCC 17.11.060, SIP Rule 222, ARS 49-485]

The Permittee who has been granted an individual permit by PDEQ shall maintain a complete copy of the permit onsite. If it is not feasible to maintain a copy of the permit onsite, the Permittee may request, in writing, to maintain a copy of the permit at an alternate location. Upon written approval by the Control Officer, the Permittee must maintain a complete copy of the permit at the approved alternative location. In addition the machine(s), equipment, device(s), or other article(s) for which the permit has been issued shall be affixed with a unique and clearly visible and accessible identification (ID).

#### **5. Fee Payment**

[PCC 17.12.040.A.9 & PCC 17.12.220, SIP Reg 24]

The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.220.

#### **6. Annual Emissions Inventory Questionnaire**

[PCC 17.12.160, SIP Rule 623]

- a. When requested by the Control Officer, the Permittee shall complete and submit an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Control Officer makes the inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed.
- b. The questionnaire shall be on a form provided by or approved by the Control Officer and shall include the information required by PCC 17.12.160.

#### **7. Compliance Certification**

[PCC 17.12.040.A.5 & PCC 17.12.080.A.2]

The Permittee shall submit to the Control Officer a compliance certification that describes the compliance status of the source with respect to each permit Condition. Certifications shall be submitted on the dates and frequency specified in Condition 52.a.

- a. The compliance certification shall include the following:
  - i. Identification of each term or Condition contained in the permit including emission limitations, standards, work practice, or management practices that are the basis of the certification;
  - ii. Identification of the method(s) or other means used by the Permittee for determining the compliance status of the source with each term and Condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under PCC 17.12.040 (A)(3), (monitoring including the related recordkeeping and reporting requirements that verify compliance with the monitoring). If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with §113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information;

- iii. The status of compliance with the terms and Conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means in Condition 7.a.ii above. The certification shall identify each deviation and take it into account in the compliance certification.
  - iv. For emission units subject to 40 CFR 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 64 occurred.
  - v. All instances of deviations from permit requirements reported in accordance with Condition 11.b as well as progress reports on all outstanding compliance schedules submitted pursuant to PCC 17.12.080; and
  - vi. Other facts the Control Officer may require to determine the compliance status of the facility.
- b. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator. The address for the EPA Administrator is:

**EPA Region 9 Enforcement Office, 75 Hawthorne St (Air-5), San Francisco, CA 94105**

## **8. Certification of Truth, Accuracy and Completeness**

[PCC 17.12.080.A.3]

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 and any other certification required by this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

## **9. Inspection and Entry**

[PCC 17.12.080.A.4]

The Permittee shall allow the Control Officer or the authorized representative of the Control Officer upon presentation of proper credentials to:

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

## **10. Permit Revision Pursuant To Federal Hazardous Air Pollutant Standard**

[PCC 17.12.010.D.3]

If this source becomes subject to a standard promulgated by the Administrator pursuant to § 112(d) of the Clean Air Act (Hazardous Air Pollutants), then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

## 11. Excess Emissions, Permit Deviations, and Emergency Reporting

[PCC 17.12.170]

### a. Excess Emissions Reporting

[PCC 17.12.170]

#### i. Excess emissions shall be reported as follows:

(a) The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. The report shall be in 2 parts as specified:

(i) Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emissions that includes all available information in Condition 11.a.i.(b) below. The number to call to report excess emissions is **520-724-7400**. The facsimile number to report excess emissions is **520-838-7432**. The e-mail address to report excess emissions is **Air.Permits@pima.gov**.

(ii) Detailed written notification by submission of an excess emissions report within 72 hours of the notification in Condition 11.a.i.(a)(i) above. Notifications should be sent to:

**PDEQ Air Program 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701.**  
**Air.Permits@pima.gov**.

(b) The report shall contain the following information:

(i) The identity of each stack or other emission point where the excess emission occurred;

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

(iii) The time and duration or expected duration of the excess emissions;

(iv) The identity of the equipment from which the excess emissions emanated;

(v) The nature and cause of the emissions;

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

(vii) The steps that were or are being taken to limit the excess emissions; If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

ii. 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 the 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 as provided in Condition 11.a.i above.

b. Permit Deviations Reporting

[PCC 17.12.170.A.5.b]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Control Officer by certified mail, facsimile, e-mail ([Air.Permits@pima.gov](mailto:Air.Permits@pima.gov)) or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the Permittee first learned of the occurrence of a deviation from a permit requirement.

c. Emergency Provision

[PCC 17.12.170.E]

- i. A "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 emission attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- ii. An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if Condition 11.c.iii below is met.
- iii. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (a) An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
  - (b) At the time of the emergency, the permitted facility was being properly operated;
  - (c) During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (d) The Permittee submitted notice of the emergency to the Control Officer by certified mail, hand delivery, e-mail ([Air.Permits@pima.gov](mailto:Air.Permits@pima.gov)) or facsimile transmission 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.
- iv. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- v. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

d. Compliance Schedule

[ARS § 49-480.F.3 & 5]

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 Control Officer within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or Conditions that have been violated.

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

[PCC 17.12.180]

i. Applicability

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

- (a) Promulgated pursuant to §§ 111 or 112 of the Clean Air Act,
- (b) Promulgated pursuant to Titles IV or VI of the Clean Air Act,
- (c) Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. E.P.A., or
- (d) Included in a permit to meet the requirements of PCC 17.16.590.A.5.

ii. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The Permittee of a source with emissions in excess of an applicable emission limitation due to malfunction 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 owner or operator of the source has complied with the reporting requirements in Condition 11.a above and has demonstrated all of the following:

- (a) The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the operator;
- (b) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- (c) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that the measures were impracticable;
- (d) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
- (e) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (f) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (g) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in PCC Chapter 17.08 that could be attributed to the emitting source;
- (h) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
- (i) All emissions monitoring systems were kept in operation if at all practicable; and

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

iii. Affirmative Defense for Startup and Shutdown

- (a) Except as provided in Condition 11.e.iii.(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. The Permittee of a source with emissions in excess of an applicable emission limitation due to startup and shutdown 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 owner or operator of the source has complied with the reporting requirements of 11.a above and has demonstrated all of the following:

- (i) The excess emissions could not have been prevented through careful and prudent planning and design;
- (ii) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
- (iii) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- (iv) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
- (v) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- (vi) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in PCC Chapter 17.08 that could be attributed to the emitting source;
- (vii) All emissions monitoring systems were kept in operation if at all practicable; and
- (viii) The Permittee's actions in response to the excess emissions were documented by contemporaneous records.

- (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 11.e.ii above.

iv. 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 11.e.ii above.

v. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Conditions 11.e.ii or iii, the Permittee of the source shall demonstrate, through submission of the data and information required by 11.e.i through v and 11.a above, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

## 12. Recordkeeping Requirements

[PCC 17.12.040.A.4]

- a. The Permittee shall keep records of all required monitoring information including recordkeeping requirements established pursuant to PCC 17.11.190, where applicable, for the following:
  - i. The date, place as defined in the permit, and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The name of the company or entity that performed the analyses;
  - iv. A description of the analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.
- b. The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- c. All required records shall be maintained using a normal business electronic recordkeeping format or printed records including handwritten forms or logbooks utilizing indelible ink.

## 13. Reporting Requirements

[PCC 17.12.040.A.5]

The Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- a. Compliance certifications in accordance with Condition 7 above.
- b. Excess emissions; permit deviations, and emergency reports in accordance with Condition 11 above.
- c. Performance test results in accordance with Condition 17 below.
- d. Other reports required by any of the Conditions in Part B of this permit.

## 14. Duty to Provide Information

[PCC 17.12.040.A.8.e, PCC 17.12.010.G, & PCC 17.12.010.H, SIP Rule 621]

- a. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer 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 Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee, for Class I sources, shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- b. If the Permittee has failed to submit any relevant facts or if the Permittee 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. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

## 15. Permit Amendment or Revision

[PCC 17.12.100, PCC 17.12.110 & PCC 17.12.120]

The Permittee shall apply for a permit amendment or revision for changes to the facilities which do not qualify for a facility change without revision under Condition 16, as follows:

- a. Administrative Permit Amendment (PCC 17.12.100);
- b. Minor Permit Revision (PCC 17.12.110);
- c. Significant Permit Revision (PCC 17.12.120).

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

## 16. Facility Changes Allowed Without Permit Revisions

[PCC 17.12.090]

- a. A facility with a Class I permit may make changes without a permit revision if all of the following apply:
  - i. The changes are not modifications under any provision of Title I of the Clean Air Act (Air Pollution Prevention and Control) or under modifications as defined in A.R.S. 49-401.01;
  - ii. 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;
  - iii. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
  - iv. The changes satisfy all requirements for a minor permit revision under PCC 17.12.110; and
  - v. The changes do not contravene federally enforceable permit terms and Conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.
- 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 the substitution meets all of the requirements of Conditions 16.a, d, and e.
- c. Except for sources with authority to operate under general permits, permitted sources may trade increases and decreases in emissions within the permitted facility, as established in the permit under PCC 17.12.040.A.12 if an applicable implementation plan provides for the emissions trades, without applying for a permit revision and based on the seven working days' notice prescribed in Condition 16.d below. This provision is available if the permit does not provide for the emissions trading as a minor permit revision.
- d. For each change under 16.a through c above, a written notice, by certified mail or hand delivery, shall be received by the Control Officer and the Administrator a minimum of seven (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, or if advance notification is not practicable as soon after the change as possible.

- e. Each notification shall include:
  - i. When the proposed change will occur;
  - ii. A description of the change;
  - iii. Any change in emissions of regulated air pollutants;
  - iv. The pollutants emitted subject to the emissions trade, if any;
  - v. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade;
  - vi. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply; and
  - vii. Any permit term or Condition that is no longer applicable as a result of the change.
- f. The permit shield described in Condition 20 shall not apply to any change made under this Condition. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the implementation plan authorizing the emissions trade.
- g. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under PCC 17.12.040.A11 shall not require any prior notice.
- h. Notwithstanding any other part of this Condition, the Control Officer may require a permit to be revised for any change that when considered together with any other changes submitted by the same source under these provisions over the term of the permit, do not satisfy the requirements in Condition 16.a.

## 17. Testing Requirements

[PCC 17.11.210, SIP Reg 50, SIP Rule 212]

- a. New sources required to conduct performance testing shall do so within 60 days after the source has achieved the capability to operate at its maximum production rate on a sustained basis but no later than 180 days after initial startup of such sources. The Permittee shall conduct performance testing as specified in Part B of this permit and at such other times as may be required by the Control Officer. The Permittee shall furnish the control officer a written report or the results of the tests.
- b. Operational Conditions
 

Performance tests shall be conducted while the unit is operating at full load under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Control Officer, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in PCC 17.04.340.A) shall not constitute representative operational conditions unless otherwise specified in the applicable requirement.
- c. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual, 40 CFR 52; Appendices D and E, 40 CFR 60; Appendices A through F; and 40 CFR 61, Appendices B and C unless modified by the Control Officer pursuant to PCC 17.11.210.B.

d. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Control Officer, in accordance with PCC 17.11.210.D and the Arizona Testing Manual. This test plan must include the test duration, test location(s), test methods, and source operation and other parameters that may affect the test results.

e. Stack Sampling Facilities

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

- i. Sampling ports adequate for test methods applicable to the facility;
- ii. Safe sampling platform(s);
- iii. Safe access to sampling platform(s); and,
- iv. Utilities for sampling and testing equipment.

f. Interpretation of Final Results

Unless otherwise identified in Part B of this permit, 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 means of 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 Control Officer's approval, be determined using the arithmetic mean of the results of the other two runs. If the Control Officer or the Control Officer's designee is present, tests may only be stopped with the Control Officer's or such designee's approval. If the Control Officer or the Control Officer's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

g. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Control Officer within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and PCC 17.11.210.A. If additional time is needed to submit the results, the Permittee shall send a written request for an extension describing the circumstances and specifying the time needed to submit the report for approval by the Control Officer.

[AZ Testing Manual Page 8 (4 Weeks ~ 30 days)]

## 18. Property Rights

[PCC 17.12.040.A.8.d]

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

## 19. Severability Clause

[PCC 17.12.040.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit that results in any provision of this permit being held invalid, the remainder of this permit shall not be affected thereby.

## 20. Permit Shield

[PCC 17.11.080]

Compliance with the Conditions of this permit shall be deemed compliance with the applicable requirements identified in the permit. The permit shield shall not apply to any change made in accordance with Conditions 15.b and 16 above.

## 21. Accident Prevention Requirements under the Clean Air Act (CAA § 112(R))

Should this stationary source, as defined in 40 CFR Part 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit a risk management plan (RMP) by the date specified in § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 and Part B of this permit.

## 22. Requirement to obtain Activity Permits

### a. Fugitive Dust Activity Permits

The Permittee shall not conduct, cause or allow land stripping, earthmoving, blasting, trenching or road construction without first obtaining an activity permit from the Control Officer in accordance with PCC 17.14.040.

[PCC 17.14.040]

### b. Asbestos Requirements (Demolition/Renovation)

Should this stationary source, pursuant to 40 CFR 61, Subpart M become subject to the National Emission Standards for Asbestos regulations when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR 61, Subpart M and shall comply with all other applicable requirements of Subpart M. The Permittee shall keep a record of all relevant paperwork on file.

[40 CFR 61, Subpart M & PCC 17.14.070]

### c. Open Burning Permits

The Permittee shall not ignite, cause to be ignited, allow or maintain any open outdoor fire without first obtaining an activity permit from the Control Officer or delegated authority unless exempted under PCC 17.14.080C.

[PCC 17.14.080]

## 23. Stratospheric Ozone Depleting Substances

[40 CFR 82 and PCC 17.16.710]

The Permittee shall not use, sell, or offer for sale any fluid as a substitute material for use in any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator or freezer unit, or other cooling or heating device designed to use a chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC) compound as a working fluid, unless such fluid has been approved for sale and such use by the Administrator. The Permittee shall keep a record of all paperwork relevant to the applicable requirements of 40 CFR 82, Subpart F onsite.

## **PART B: SPECIFIC CONDITIONS**

*(Unless otherwise noted, References to A.R.S. are references to the Arizona Revised Statutes, references to A.A.C. are references to the Arizona Administrative Code, references to PCC are references to Title 17 of the Pima County Code, and references to SIP are references to the Pima County State Implementation Plan. Underlined text are hyperlinks within the permit or to external websites referencing the provision.)*

### **§ 1: Applicability**

24. Statutory Authority [PCC 17.11.010, 17.11.020, PCC 17.11.090.A, 17.12.010, and ARS § 49-480, SIP Rules 103, 111, 301]

Emissions from the facility, specifically the emissions from the equipment and operations described in the permit application, which fall under SIC Code (4911), are subject to enforceable limitations in the Specific Conditions in this Part B. This permit is issued pursuant to ARS § 49-480 and authorizes the construction and/or operation of the equipment and operations listed in the equipment list in Attachment 2 of this permit. This authorization is based on the regulations in effect on the date of issuance of this permit, and a finding that the allowable emissions from the facility, specifically the emissions from the equipment and operations more fully described in the permit application constitute a “major source” within the meaning of PCC 17.04.340.A.128. Compliance with the Conditions of this permit shall be deemed to be compliant with any applicable requirement and regulation identified in this permit as of the date of issuance. Notwithstanding the above findings, this permit shall not relieve the Permittee nor its subcontractors from compliance with all local or county codes, state statutes and federal laws or from obtaining permits for other operations or activities when required.

25. Permit Classification

Class I; Major Source; Stationary: The facility covered by this permit constitutes a major source of Nitrogen Oxides (NO<sub>x</sub>) and Carbon Monoxide (CO), and a minor source of hazardous air pollutants (HAPs), and a true minor source of all other criteria pollutants based on 8760 hours of operation per year.

26. Permit Sections

The Specific Conditions in this Part B have been grouped into the following permit sections (§§):

§ 1: Authority, Classification, and Permit Organization (This Section)

§ 2: NSPS Stationary Gas Turbine

§ 3: Facility Wide Operations

27. Permit Organization

The Specific Conditions in this Part B have been organized under the source categories, affected facilities, emission sources, and operations in §§ 1 through 3 as they apply to the facility and equipment listed in Attachment 2.

## § 2: NSPS Stationary Gas Turbine

### Emission Limits & Standards

[PCC 17.12.040.A.2]

#### 28. NSPS Nitrogen Oxides Standard

- a. The Permittee shall not cause to be discharged into the atmosphere any gases which contain nitrogen oxides in excess of: [40 CFR 60.332(a)(1)]

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

STD = allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1)) NO<sub>x</sub> emission concentration (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NO<sub>x</sub> emission allowance for fuel bound nitrogen as identified in Condition 28.b.

- b. If the Permittee elects to apply a NO<sub>x</sub> emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under 40 CFR 60.8 as follows:

Fuel-bound Nitrogen (percent by weight)	F (NO <sub>x</sub> percent by volume)
N ≤ 0.015	0
0.015 < N ≤ 0.1	0.04 (N)
0.1 < N ≤ 0.25	0.004 + 0.0067(N-0.1)
N > 0.25	0.005

where:

N = the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture.

#### 29. Nitrogen Oxides & Carbon Monoxide Limits

The Permittee shall not allow the emissions of nitrogen oxides or carbon monoxide to equal or exceed 250 tons per year on a 12-month rolling total basis. [PCC 17.11.190.B]

**[Material Permit Condition]**

30. Fuel & Sulfur Content Limitation

The Permittee shall only burn pipeline natural gas that contains total sulfur not in excess of 0.8 percent by weight (8000 ppmw).

[40 CFR 60.333(b) & PCC 17.11.190.B]

**[Material Permit Condition]**

32. Operation and Maintenance Standard

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the unit 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 or Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

b. CEMS Operation and Maintenance

The Permittee shall certify, maintain and operate the CEMS to monitor and record nitrogen oxides, carbon monoxide, and diluent gas (CO<sub>2</sub> or O<sub>2</sub>) emissions. The CEMS shall be operated & calibrated according to the recommendations of the system manufacturer or as approved by the Administrator or the Control Officer.

[40 CFR 60.334(c), PCC 17.20.100, 17.11.190.B]

**[Material Permit Condition]**

**Monitoring Requirements**

[PCC 17.12.040.A.3]

33. Nitrogen Oxides Standard, Nitrogen Oxide & Carbon Monoxide Emission Limits

Compliance with monitoring is achieved by the recordkeeping requirements.

34. Fuel & Sulfur Content Limitation

Compliance with monitoring is achieved by recordkeeping requirements.

35. Monitoring for NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub>

[PCC 17.11.190.B]

- a. The Permittee shall calibrate, maintain, and operate the CEMS and data acquisition and handling system (DAHS) for measuring and recording emissions of nitrogen oxides and carbon dioxide or oxygen while the gas turbine is firing.

[40 CFR 60.334(c)]

**[Material Permit Condition]**

- b. The CEMS for NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub> shall meet the following requirements:

[40 CFR 60.334(c) & 40 CFR 60.334(b)(3)(iii)]

i. 40 CFR Part 75, Appendix A, "Specifications and Procedures."

- (a) Installation and measurement location.
- (b) Equipment specifications.
- (c) Performance specifications.
- (d) Data acquisition and handling systems.
- (e) Calibration gas.
- (f) Certification tests and procedures.
- (g) Calculations.

ii. 40 CFR Part 75, Appendix B, “Quality Assurance and Quality Control Procedures.”

- (a) Quality Assurance/ Quality Control Program
- (b) Frequency of Testing

iii. 40 CFR Part 75, Appendix C, (2) “Missing Data Estimation Procedures.”

Load-Based Procedure for Missing Flow rate, NO<sub>x</sub> Concentration and NO<sub>x</sub> Emission Rate Data.

iv. 40 CFR Part 75, Appendix F, (3) “Conversion Procedures.”

Procedures for NO<sub>x</sub> Emission Rate.

v. Data Reduction.

The Permittee shall comply with the data reduction requirements of 40 CFR 75.10(d)(1).

c. The Permittee shall comply with all the applicable recordkeeping and reporting requirements of 40 CFR Part 75, Subparts F and 40 CFR Part 75, Subpart G, respectively.

### 36. Monitoring for CO

[PCC 17.11.190.B]

a. The Permittee shall calibrate, maintain, and operate the CEMS and DAHS for measuring and recording emissions of carbon monoxide while the gas turbine is firing.

**[Material Permit Condition]**

b. The CEMS for CO shall meet the following requirements:

i. 40 CFR Part 60, Appendix B, “Performance Specifications,” Performance Specification 4A, “Specifications and Test Procedures for Carbon Monoxide Continuous Monitoring Systems in Stationary Sources.”

ii. 40 CFR Part 60, Appendix F, “Quality Assurance Procedures.”

iii. The CO CEMS and DAHS monitoring and recording devices shall be installed and operational prior to conducting any performance test(s). Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

[PCC 17.12.040.A.3.c]

**[Material Permit Condition]**

iv. The Permittee shall conduct a performance evaluation of the CO CEMS during any performance test required by this Section or within 30 days thereafter in accordance with the applicable performance specifications in Appendix B of 40 CFR Part 60. The Permittee shall conduct CO CEMS performance evaluations at such other times as may be required by the Control Officer under § 114 of the Act.

[PCC 17.12.040.A.3.c]

v. The Permittee shall furnish the Control Officer within 60 days of completion one or, upon request, more copies of a written report of the results of the performance evaluation.

[PCC 17.12.040.A.3.c]

vi. The Permittee must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in 40 CFR, Part 60, Appendix B. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

[PCC 17.12.040.A.3.c]

- vii. Except for system breakdowns, repairs, calibration checks, and zero span adjustments required under Condition 36.b.vi., the Permittee shall meet minimum frequency of operation as follows: The CO CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. [PCC 17.12.040.A.3.c]
- viii. The CO CEMS devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. [PCC 17.12.040.A.3.c]
- ix. The Permittee shall reduce all data to 1-hour averages. 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard. After conversion into units of the standard in Condition 29, the data may be rounded to the same number of significant digits as used to specify the emission limit. [PCC 17.12.040.A.3.c]

### Recordkeeping Requirements

[PCC 17.12.040.A.4]

- 37. Nitrogen Oxides Standard & Emission Limits [40 CFR 60.334(c), 40 CFR 60.334(b)(3)(iii) & 40 CFR 60.334(i)(2)]  
[PCC 17.11.190.B]

The Permittee shall use the NO<sub>x</sub> and CO CEMS data to calculate the amount of NO<sub>x</sub> and CO being emitted during periods when the turbine is firing. Amounts of NO<sub>x</sub> and CO emissions shall be summarized daily by the DAHS with the previous 12-month rolling total computed by the fifth (5<sup>th</sup>) working day of each month. For mass based 12-month rolling average purposes, when the NO<sub>x</sub> or CO CEMS is inoperative for any reason, the Permittee shall compute NO<sub>x</sub> and CO emissions using the missing data procedures prescribed in 40 CFR Part 75, Subpart D. For 40 CFR Part 60, Subpart GG purposes, periods of missing NO<sub>x</sub> data shall be reported as monitor downtime in the excess emissions and monitoring performance reports required in 40 CFR 60.7(c).

- 38. Fuel & Sulfur Content [40 CFR 60.334(h)(3)(i)]

The Permittee may verify compliance with this requirement by maintaining a current vendor-provided copy or a current valid purchase contract of that part of the Federal Energy Regulatory Commission (FERC)-approved Tariff agreement that limits transmission to pipeline quality natural gas of sulfur content less than 0.8 percent by weight and that the maximum total sulfur content is 20 grains/ 100 scf or less.

- 39. Operation and Maintenance (Includes CEMS)

- a. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the unit; any malfunction of the air pollution control equipment; or any periods during which the continuous emission monitoring system is inoperative. [40 CFR 60.7(b)]
- b. The Permittee shall maintain a file of all measurements, including CEMS and performance testing measurements; all CEMS performance evaluations; all CEMS calibration checks; adjustments and maintenance performed on the system; and all other information required by this permit recorded in a permanent form suitable for inspection. The files shall be retained for at least five years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f) & PCC 17.12.040.A.4.b]

40. Notification of Physical or Operational Change

- a. The Permittee shall furnish the Administrator and the Control Officer written notification or, if acceptable to the Administrator, the Control Officer, and the Permittee, electronic notification, of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator or Control Officer may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]
- b. If notification substantially similar to that in Condition 40 is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of Condition 40. [40 CFR 60.7(g)]

41. Excess Emissions, Permit Deviations and Monitoring System Performance Reports for NO<sub>x</sub> and CO Emissions Limitations. [PCC 17.12.040.A.5.b, PCC 17.12.170 & PCC 17.12.040.E.3.d]

- a. The Permittee shall report to the Control Officer any emissions in excess of the limits (as defined in PCC 17.04.340.A.78) established by this permit within 24 hours of the time the Permittee first learned of the excess emissions occurrence. The Permittee shall report other deviations from permit requirements in this permit within two working days of the time the Permittee first learned of the occurrence of the deviation (*See Condition 11 for detailed information on these two reports*).
- b. If the Permittee exceeds the NO<sub>x</sub> & CO emission limitations in Condition 29 of this Section, the Permittee shall immediately apply for a permit revision pursuant to the provisions in PCC 17.16.550 and PCC 17.16.590 (i.e., major modifications and Best Available Control Technology (BACT) requirements).
- c. The Permittee shall submit excess emissions and monitoring systems performance report and/or summary report form (*See Condition 41.c.v*) to the Administrator and Control Officer semiannually, except when more frequent reporting is specifically required by an applicable subpart; the Administrator, or the Control Officer, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information, if applicable: [40 CFR 60.334(j)(1), 40 CFR 60.7(c) & 40 CFR 60.334(j)(5), PCC 17.11.190.B]
  - i. The magnitude of the excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
  - ii. Specific identification of each period of excess emissions that occur during startup, shutdown, and/or malfunction of the unit. The nature and cause of any malfunction (if known) and the corrective action taken or prevention measures adopted.
  - iii. The date and time identifying each period during which either of the CEMS were inoperative except for zero and span checks and the nature of the system repairs or adjustments.
  - iv. When no excess emissions have occurred or either of the CEMS have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

- v. The summary report form shall contain the information and be in the format shown in 40 CFR 60.7, Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored. [40 CFR 60.7(d)]
  - (a) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator or the Control Officer.
  - (b) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.
- d. For the purpose of excess emission reports, periods of excess emissions and downtime that shall be reported are defined as follows: [40 CFR 60.334(c)]
  - i. An hour of excess emissions shall be any unit operating hour, including startup, shutdown and malfunction, in which the 4-hour rolling average NO<sub>x</sub> concentration exceeds the applicable emission limit in Condition 28. The terms used in this Condition are defined as follows: [40 CFR 60.60.334(j)(1)(iii)(A)]
    - (a) “4-hour rolling average NO<sub>x</sub> concentration” means the arithmetic average of the average NO<sub>x</sub> concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub>) and the three unit operating hour average NO<sub>x</sub> concentrations immediately preceding that unit operating hour; and
    - (b) “Unit operating hour” means a clock hour during which any fuel is combusted in the stationary gas turbine 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.
  - ii. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO<sub>x</sub> or CO concentration, diluent (or both). [40 CFR 60.334(j)(1)(iii)(B), PCC 17.11.190.B]

## Testing Requirements

[PCC 17.11.160, PCC 17.12.040.A.3.a & PCC 17.20.010.]

- 42. For purposes of demonstrating compliance, these RATA and/or test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit 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 federal requirements if the appropriate performance or compliance procedures or methods had been performed.
  - a. The Permittee shall conduct annual Relative Accuracy Test Audits (RATA) on the nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) CEMS prior to the anniversary date of the permit using approved EPA Reference Methods. [PCC 17.12.040.A.3.c]
  - b. Performance and RATA tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator: [40 CFR 60.8(b) & PCC 17.11.210.B]
    - i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;

- ii. Approves the use of an equivalent method;
- iii. Approves the use of an alternate method, the results of which have been determined to be adequate for indicating whether a specific source is in compliance;
- iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard; or
- v. Approves shorter sampling times and smaller sample volumes when necessitated by process variable or other factors.

Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under § 114 of the Act.

- c. The Permittee shall provide the Control Officer at least 14 days prior notice of any performance or RATA test to afford the Control Officer the opportunity to have an observer present. If after 14 days notice for an initially scheduled performance test, there is a delay (due to operations problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the Control Officer as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Control Officer by mutual agreement.
 

[40 CFR 60.8(d) & PCC 17.12.050.D]
- d. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 

[40 CFR 60.8(e) & PCC 17.11.210.E]

  - i. Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
  - ii. Safe sampling platform(s).
  - iii. Safe access to sampling platform(s).
  - iv. Utilities for sampling and testing equipment.
- e. In conducting performance tests, the Permittee shall use, as reference methods and procedures, the test methods in Appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR 60.335 except as provided for in 40 CFR 60.8(b).
 

[40 CFR 60.335(b)]
- f. Should the Permittee desire to test or be required to test by the Control Officer to determine compliance with any applicable standard, a written request with the appropriate test methods shall be made to the Control Officer or Permittee respectively.
 

[PCC 17.12.040.A.3 & PCC 17.20.010]

### § 3: Facility Wide Operations

#### Emission Limits and Standards

[PCC 17.12.040.A.2]

#### 43. Opacity Standard

The Permittee shall not cause or permit the effluent from a single emission point, multiple emission point, or fugitive emissions source to have an average optical density equal to or greater than 20%, subject to the following provisions:

[SIP Rule 321 & PCC 17.16.040]

**[This Condition is only federally enforceable when opacity is above 40%]**

- i. Opacities (optical densities), as measured in accordance with Method 9 or as otherwise provided in this permit, of an effluent shall be measured by a certified visible emissions evaluator with his/her natural eyes or with certified equipment, approximately following the procedures which were used during his/her certification, or by an approved and precisely calibrated in-stack monitoring instrument.
- ii. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted herein. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be as specified in PCC Table 17.16.040. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation.
- iii. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.
- iv. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements in Conditions 43 and 44, Conditions 43 and 44 shall not apply.

#### 44. Visibility Limiting Standard

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

[SIP Rule 343.A & PCC 17.16.050.D]

- a. This subsection shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.  
[SIP Rule 343.B & PCC 17.16.050.D]
- b. This subsection shall not apply to the generation of airborne particulate matter from undisturbed land.  
[PCC 17.16.050.D.3]  
**[Locally Enforceable Condition]**
- c. Any disregard of, neglect of, or inattention to other controls required herein, during any time when SIP Rule 343.A is in effect, shall automatically waive the exception, and such relaxation of controls shall be a violation.  
[SIP Rule 343.B.2]

45. Unpaved Service Roads and Parking Areas

The Permittee shall not cause, suffer, allow, or permit a driveway, or a parking area, or a vacant lot, or a suburban open area to be constructed, used, altered, repaired, demolished, cleared, or leveled, or the earth to be moved or excavated, without taking reasonable precautions to limit excessive amounts of particulate matter from becoming airborne. Dust and other types of air contaminants shall be kept 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. [SIP Rule 318.A & PCC 17.16.080.A]

**Monitoring Requirements**

[PCC 17.12.040.A.3]

46. Opacity & Visibility Limiting Standard

The Permittee shall have a certified Method 9 observer conduct a visual survey of emissions from all fugitive dust sources at the facility each calendar quarter. The Permittee shall at a minimum keep in a log a record of the name of the individual making the observation, the date and location on which the observation was made, and the results of the observation. If the observer sees a visible emission from a fugitive dust source that on an instantaneous basis appears to exceed 20%, then the observer shall, if practicable, take a six-minute Method 9 observation of the visible emission.

- a. If the six-minute opacity of the visible emission is less than or equal to the 20% opacity standard, the Permittee shall have the observer make a record in a log of the location, date, and time of the observation, and the results of the Method 9 observation.
- b. If the six-minute opacity of the visible emission exceeds the 20% opacity standard, then the Permittee shall adjust or repair the controls or equipment to reduce opacity to below the applicable opacity standard and report it as an excess emissions under Conditions 50 and 11.a. If necessary more effective dust suppressant activities shall be taken to reduce/ eliminate the source of the fugitive dust.

47. Unpaved Service Roads and Parking Areas

Follow procedures in Condition 46.

**Recordkeeping Requirements**

[PCC 17.12.040.A.4]

48. Opacity & Visibility Limiting Standard

The Permittee shall record the results of the monitoring in Condition 46. At a minimum the record shall indicate the date and results of the visual survey, the dates and types of dust suppressant activities that were undertaken if any, the name and title of the individual making the entry.

49. Unpaved Service Roads and Parking Areas

The Permittee shall record the results of the monitoring in Condition 47. At a minimum the record shall indicate the date and results of the visual survey, the dates and types of dust suppressant activities that were undertaken if any, the name and title of the individual making the entry.

**Reporting Requirements**

[PCC 17.12.040.A.5]

**50. Excess Emissions and Permit Deviation Reporting**

[PCC 17.12.040.A.5.b &amp; PCC 17.12.040.E.3.d]

The Permittee shall report to the Control Officer any emissions in excess of the limits (as defined in PCC 17.04.340, “Excess emissions”) established by this Part within 24 hours of the time the Permittee first learned of the excess emissions occurrence. The Permittee shall report other deviations from permit requirements in this Part within two working days of the time the Permittee first learned of the occurrence of the deviation (*See Part A, Section 11 for detailed information on these two reports*).

**51. Semiannual Summary Reports of Required Monitoring**

[PCC 17.12.040.A.5.a]

- a. The Permittee shall submit reports of any required monitoring within Part B of this permit at least every six months. All instances of excess emissions and deviations from permit requirements, as described in Condition 11, shall be clearly identified in such reports. These reports shall include the following:
  - i. The 12-month rolling total of NO<sub>x</sub> and CO emissions for each month since the last semiannual summary report; and
  - ii. Results of any performance tests conducted during the reporting period.
- b. Semiannual summary reports shall be due on January 31<sup>st</sup> (covering the period July 1<sup>st</sup> through December 31<sup>st</sup>) and July 31<sup>st</sup> (covering the period January 1<sup>st</sup> through June 30<sup>th</sup>) of each year. The first semiannual summary report due after permit issuance may not cover a 6-month period.

**52. Compliance Certification Reporting**

[PCC 17.12.220.A.2]

- a. The Permittee shall submit an annual compliance certification to the Control Officer and to EPA Region IX at the addresses in Conditions 11.a and 7.b. The compliance certification report is due on February 15<sup>th</sup> of each year (covering the period January 1<sup>st</sup> through December 31<sup>st</sup> of the previous year). The first report due after permit issuance may not cover a 12-month period (*See Condition 7 for detailed information on this report*).
- b. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in this permit, nothing in this permit 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. [40 CFR 60.11(g)]

**53. Emission Inventory Reporting**

[PCC 17.12.320]

Every source subject to a permit requirement shall complete and submit an annual emissions inventory questionnaire when requested by the Control Officer. The questionnaire is due by March 31<sup>st</sup>, or 90 days after the Control Officer makes the inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. These requirements apply whether or not a permit has been issued and whether or not a permit application has been filed (*See Condition 6 for additional information on this report*).

**Testing Requirements**

[PCC 17.11.160, PCC 17.12.040.A.3.a, PCC 17.20.010, PCC 17.20.040]

54. For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit 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 federal requirements if the appropriate performance or compliance procedures or methods had been performed.

a. Opacity

When required the opacity of visible emissions shall be determined by EPA Test Method 9, Appendix A, 40 CFR Part 60 or by EPA approved Alternate Method ALT-082 to monitor compliance with the opacity standards identified in this permit. [PCC 17.12.040.A.3]

b. Fuel Sulfur Limitations

Documentation, such as tariff agreements or invoices or statements from the fuel supplier, showing the fuels delivered and verifying the fuel sulfur content is below applicable standards, shall be an acceptable means to demonstrate compliance with fuel sulfur limitations identified in this permit. If otherwise required or when requested by the Control Officer, the fuel sulfur content of fuels shall be determined using ASTM D129, D1266, D1552, D2622, D4294, D5453 or an equivalent for liquid fuels, and ASTM D1072, D3246, D4084, D4468, D4810, D6228, D6667, Gas Processors Association Standard 2377, or an equivalent for gaseous fuels.

c. Alternative Test Plan

The Permittee may submit an alternate and equivalent test method(s) for approval by the Control Officer that is listed in 40 CFR Subpart 60, Appendix A or is approved by the EPA as an alternative test method (See <https://www.epa.gov/emc/broadly-applicable-approved-alternative-test-methods> for a listing of approved alternate test methods).

d. Test Protocols and Guidelines

Should the Permittee desire to test, or be required to test by the Control Officer to determine compliance with any applicable standard, a written request with the appropriate test methods shall be made to the Control Officer or Permittee respectively.

e. Concealment

The Permittee shall not construct, install, erect, use, replace, modify, or operate an emission source so as to conceal an emission which would otherwise be a violation of a control standard. Concealment shall include:

- a. The use of gaseous diluents to achieve compliance with an opacity standard or with a standards which based on the concentration of a pollutant in the gasses discharged to the atmosphere.
- b. Operating in a piecemeal fashion to avoid compliance with a standard that would otherwise apply to the source on the basis of its size; and
- c. Operating in a manner, under conditions, or during such times that emissions cannot be observed.

## **ATTACHMENT 1: APPLICABLE REGULATIONS**

- 40 CFR, Part 60 Standards of Performance for New Stationary Sources**
  - Subpart A General Provisions
  - Subpart GG New Source Performance Standards for Stationary Gas Turbines
  
- 40 CFR, Part 61 National Emission Standards for Hazardous Air Pollutants**
  - Subpart M National Emission Standards for Asbestos
  
- 40 CFR, Part 75 Continuous Emission Monitoring**
  - Applicable Subparts and Appendices
  
- 40 CFR Part 82 Protection of Stratospheric Ozone**
  - Subpart F Recycling and Emissions Reduction

### **Pima County State Implementation Plan (SIP):**

- Rule 103 – Authority
- Rule 111 – General Applicability
- Rule 212 – Sampling, Testing, and Analysis Requirements
- Rule 222 – Permit Display or Posting
- Regulation 24 – Permit Fee Schedules/Non-Fee Requirements
- Rule 301 – Planning, Construction, or Operating Without a Permit
- Rule 318 – Vacant Lots and Open Spaces
- Rule 321 – Standards and Applicability (Includes NESHAPS)
- Rule 332 – Compilation of Mass Rates and Concentrations
- Rule 343 – Visibility Limiting Standard
- Regulation 50 – Periodic Testing
- Rule 623 – Reporting for Emission Inventories
- Rule 621 – Reporting for Compliance Evaluations

### **Pima County Code, Title 17, Chapter 17.11 – General Provisions**

#### **Article I – General Provisions**

- 17.11.010 Statutory Authority.
- 17.11.020 Planning, Constructing, or Operating Without a Permit.

#### **Article II – General Provisions for Stationary Sources**

- 17.11.060 Permit display or posting.
- 17.11.080 Permit shield.
- 17.11.120 Material permit condition.
- 17.11.160 Test methods and procedures.
- 17.11.190 Permits Containing synthetic emission limitations and standards.
- 17.11.210 Performance tests.

### **Pima County Code, Title 17, Chapter 17.12 – Individual Permits and Permit Revisions for Class I Permits**

#### **Article I – Application Processing and Procedures**

- 17.12.010 Permit application processing procedures for Class I Permits.
- 17.12.040 Permit Contents for Class I permits.
- 17.12.060 Review by the EPA and affected states for Class I Permits
- 17.12.070 Acid Rain
- 17.12.080 Compliance plan.

**Article II – Permit Revisions, Renewal, and Transfers for Class I Permits**

- 17.12.090 Facility changes allowed without permit revisions.
- 17.12.100 Administrative permit amendments.
- 17.12.110 Minor permit Amendments.
- 17.12.120 Significant permit revision.
- 17.12.130 Permit reopenings – revocation and reissuance – termination.
- 17.12.140 Permit renewal and expiration.

**Article III – Emissions for Class I Permits**

- 17.12.160 Annual emissions inventory questionnaire.
- 17.12.170 Excess emissions reporting requirements.
- 17.12.180 Affirmative defenses for excess emissions due to malfunctions, startup, and shutdown.

**Article V – Fees for Class I Permits**

- 17.12.220 Fees related to Class I permits.

**Pima County Code, Title 17, Chapter 17.16 – Emission Limiting Standards**

**Article I – General Provisions**

- 17.16.020 Noncompliance with applicable standards.

**Article II – Visible Emission Standards**

- 17.16.040 Standards and applicability (includes NESHAP).
- 17.16.050 Visibility limiting standard.

**Article III – Emissions from Existing and New Nonpoint Sources**

- 17.16.080 Vacant lots and open spaces.

**Pima County Code Title 17, Chapter 17.20 – Emissions Source Testing and Monitoring**

**Article I – General Provisions**

- 17.20.010 Source sampling, monitoring and testing.

**Article II – Concealment of Emissions**

- 17.20.040 Concealment of emissions.

**Article V – Continuous Monitoring**

- 17.20.100 General Specifications

**Pima County Code Title 17, Chapter 17.28 – Violations and Conditional Orders**

**Article I – Violations** (inclusive)

**Article II – Conditional Orders** (inclusive)

**Article III – Circumvention** (inclusive)

**ATTACHMENT 2: EQUIPMENT LIST**

<b>Unit I.D.</b>	<b>Description</b>	<b>Capacity</b>	<b>Serial Number</b>	<b>Model</b>	<b>Installation Date</b>
P.1.	General Electric Gas Turbine Generator Set	85MW Nameplate	Turbine: 297609 Generator: 336X903	MS7001EA	February 2001

**CONTINUOUS EMISSIONS MONITORING SYSTEMS EQUIPMENT**

<b>NO<sub>x</sub> Monitor</b>	<b>Diluent Monitor</b>	<b>CO Monitor</b>
Installed & Certified	Installed & Certified	Installed & Certified

## **ATTACHMENT 3: ACID RAIN PROVISIONS**

### **1. Statement of Basis**

Statutory and Regulatory Authorities: In accordance with the Arizona Revised Statutes, Title 49, chapter 3, Article 3, Section 480.B, and Titles IV and V of the Clean Air Act, The Pima County Department of Environmental Quality issues this Phase II Acid Rain Permit pursuant to Pima County Code, Title 17 Chapter 17.12 Section 17.12.365, "Acid Rain."

### **2. Allowances**

SO<sub>2</sub> Allowances for the affected source: Pursuant to 40 CFR 73, Subpart E, the Designated Representative of the affected source shall obtain sufficient sulfur dioxide allowances each year to ensure compliance with the provisions of 40 CFR Part 73, Sulfur Dioxide Allowance System.

### **3. Comments, Notes, and Justifications**

None.

### **4. Compliance Requirement**

The Permittee, and any other owners or operators of the affected source at this facility, shall comply with the requirements contained in the attached acid rain permit application (OMB No. 2060-0258) signed by the Designated Representative Charles W. Komadina on May 16, 2007 and referenced in the November 30, 2018 application signed by Dylan Bearce.