

**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY**

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

**AIR QUALITY OPERATING PERMIT**

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

**ISSUED TO**

**EL PASO NATURAL GAS COMPANY L.L.C.  
(EPNG) - VAIL COMPRESSOR STATION  
10200 SOUTH RITA ROAD  
TUCSON, ARIZONA 85747**

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

THIS PERMIT ISSUED SUBJECT TO THE FOLLOWING: Conditions Contained in Parts A & B and Attachments 1 & 2

PDEQ PERMIT NUMBER 425

PERMIT CLASS I

ISSUED: March XX, 2015

EXPIRES: March XX, 2015

SIGNATURE

TITLE

*Rupesh Patel, Air Permit Manager, PDEQ*

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## SUMMARY

This Title V, Class I operating permit renewal is issued to El Paso Natural Gas Company (EPNG), the Permittee, for operation of their Vail Compressor Station.

EPNG provides natural gas transportation services for natural gas suppliers and end users throughout the southwestern United States, and owns and operates a large natural gas pipeline network. The Vail compressor station is one of several such stations that provide natural gas compression to the pipeline network. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing, and is accomplished at Vail by three natural gas-fired General Electric M3002-RA turbines each driving a compressor unit. Primary electric power at the Vail station is purchased power i.e. EPNG Vail compression station does not have auxiliary engines for power generation.

There is no air pollution control equipment installed on any of the gas turbines at the Vail compressor station. The three turbines were installed in 1953 and are not subject to Prevention of Significant Deterioration (PSD) review. The facility is permitted to operate 24 hours a day and 365 days a year.

This facility has been automated and hence is an unattended station. All records relating to this permit will be kept at 5151 E. Broadway, Suite 1680, Tucson, AZ 85711.

The total potential emissions emitted from this facility (excluding insignificant activities) are as follows. These figures were taken from the EPNG application dated September 18, 2013, are for reference purposes only, and are not enforceable by direct measurement unless otherwise noted in Part B of this permit.

Pollutant		Emissions <sup>1</sup> (lbs Per Hour Per Turbine)	Total Emissions (Tons Per Year)
Nitrogen Oxides	NO <sub>x</sub>	41.0	539
Carbon Monoxide	CO	13.1	173
Green House Gas	CO <sub>2e</sub>	9,321	122,473
Particulate Matter	PM <sub>10</sub>	0.53	6.90
Volatile Organic Compounds	VOC	0.17	2.19
Sulfur Oxides	SO <sub>x</sub>	0.27	3.60
Hazardous Air Pollutants	HAPs	0.082	1.08
Formaldehyde	CH <sub>2</sub> O	0.057	0.74

<sup>1</sup> NO<sub>x</sub> was based on the highest fuel rate for units similar to the EPNG Vail Compressor Station identified within the EPNG COMET database. CO based on source test data dated April 22, 2003. VOC, SO<sub>2</sub>, HAPs, PM and CO<sub>2e</sub> are based on EPA AP-42 Emission factors. NO<sub>x</sub> and CO emissions include a modest +10% Safety Factor to represent maximum operating conditions.

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

## **PART A: GENERAL PROVISIONS**

*(References to A.R.S. are references to the Arizona Revised Statutes, references to A.A.C. are references to the Arizona Administrative Code, and references to PCC are references to Title 17 of the Pima County Code)*

### **I. PERMIT EXPIRATION AND RENEWAL**

[PCC 17.12.180.A.1 and PCC 17.12.160.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.

### **II. COMPLIANCE WITH PERMIT CONDITIONS**

[PCC 17.12.180.A.8.a and 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.

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

[PCC 17.12.180.A.8.c and PCC 17.12.270]

- 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:
  - 1. 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 17.12.280.B. Any permit reopening required pursuant to this paragraph shall comply with provisions in PCC 17.12.280 for permit renewal and shall reset the five-year permit term.
  - 2. 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.
  - 3. 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.
  - 4. 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 be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of Part A shall not result in the resetting of the five-year permit term.

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

[PCC 17.12.080]

The Permittee who has been granted an operating permit or an Authorization to Operate (ATO) by PDEQ shall maintain a complete copy of the operating permit and ATO onsite. If it is not feasible to maintain a copy of the operating permit or ATO 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.

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

[PCC 17.12.180.A.9 & PCC 17.12.510]

The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.510.

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

[PCC 17.12.320]

- 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 17.12.320.

#### **VII. COMPLIANCE CERTIFICATION**

[PCC 17.12.220.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 as specified in Part B of this permit.

- A. The compliance certification shall include the following:
  - 1. 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.
  - 2. 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 17.12.180 (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 Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information.
  - 3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification.

4. 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.
  5. A progress report on all outstanding compliance schedules submitted pursuant to PCC 17.12.220; and
  6. 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**

**VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS** [PCC 17.12.220.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.

**IX. INSPECTION AND ENTRY** [PCC 17.12.220.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.

**X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD** [PCC 17.12.160.D.3]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 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.

**XI. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING** [PCC 17.12.040]

## A. Excess Emissions Reporting [PCC 17.12.040]

## 1. 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 below:

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 from PCC 17.12.040.B. The number to call to report excess emissions is **520-724-7400**. The facsimile number to report excess emissions is **520-838-7432**.

ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under XI.A.1.a.i of Part A. Notifications should be sent to:

**PDEQ Air Program 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701.**

b. The excess emission 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. The steps taken, if the excess emissions were the result of a malfunction, 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.

2. In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in 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 pursuant to XI.A.1.a and b of Part A.

## B. Permit Deviations Reporting [PCC 17.12.180.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. Notice in accordance with PCC 17.12.180.E.3.d shall be considered prompt for purposes of this permit.

## C. Emergency Provision

[PCC 17.12.180.E]

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 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.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the conditions of PCC 17.12.180.E.3 are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the Permittee can identify the cause 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, 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.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

## D. Compliance Schedule

[ARS § 49-480.F.3 &amp; 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 17.12.035]

## 1. Applicability

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

- a. Promulgated pursuant to Sections 111 or 112 of the 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.

2. 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 of XIII.B of this Part 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.

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in XI.E.3.b of Part A, 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 XIII.B of Part A 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 XI.E.2 of Part A.
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 XI.E.2 of Part A.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under XI.E.2 or 3 of Part A, the Permittee of the source shall demonstrate, through submission of the data and information required by XI.E.1 – 5 and XIII.B of Part A, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

## **XII. RECORDKEEPING REQUIREMENTS**

[PCC 17.12.180.A.4]

- A. The Permittee shall keep records of all required monitoring information including recordkeeping requirements established pursuant to PCC 17.12.190, where applicable, for the following:
  1. The date, place as defined in the permit, and time of sampling or measurements;
  2. The date(s) analyses were performed;
  3. The name of the company or entity that performed the analyses;
  4. A description of the analytical techniques or methods used;
  5. The results of such analyses; and

6. The operating conditions as existing at the time of sampling or measurement.
- B. The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings 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.

**XIII. REPORTING REQUIREMENTS**

[PCC 17.12.180.A.5]

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

- A. Compliance certifications pursuant to VII of Part A.
- B. Excess emissions; permit deviations, and emergency reports in accordance with XI of Part A.
- C. Performance test results in accordance with XVII.F of Part A.
- D. Reporting requirements are listed in Part B of this permit.

**XIV. DUTY TO PROVIDE INFORMATION**

[PCC 17.12.180.A.8.e, PCC 17.12.160.G, & PCC 17.12.160.H]

- 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.

**XV. PERMIT AMENDMENT OR REVISION**

[PCC 17.12.245, PCC 17.12.255 & PCC 17.12.260]

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 XVI of Part A, as follows:

- A. Administrative Permit Amendment (PCC 17.12.245);
- B. Minor Permit Revision (PCC 17.12.255);
- C. Significant Permit Revision (PCC 17.12.260).

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

**XVI. FACILITY CHANGES ALLOWED WITHOUT PERMIT REVISIONS**

[PCC 17.12.230]

- A. A facility with a Class I permit may make changes without a permit revision if all of the following apply:
1. 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;
  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;
  3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
  4. The changes satisfy all requirements for a minor permit revision under PCC 17.12.255; and
  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.
- 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 XVI.A, D and E of Part A.
- 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 17.12.180.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 XVI.D of Part A. This provision is available if the permit does not provide for the emissions trading as a minor permit revision.
- D. For each change under XVI.A through C of Part A, 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:
1. When the proposed change will occur;
  2. A description of the change;
  3. Any change in emissions of regulated air pollutants;
  4. The pollutants emitted subject to the emissions trade, if any;
  5. 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;
  6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply; and

7. Any permit term or condition that is no longer applicable as a result of the change.
- F. The permit shield described in PCC 17.12.310 shall not apply to any change made under XVI.A through C of this Part. 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 17.12.180.A.11 shall not require any prior notice under XVI Part A.
- H. Notwithstanding any other part of this Section, 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 the provisions of PCC 17.12.230 over the term of the permit, do not satisfy XVI.A of this Part.

## **XVII. TESTING REQUIREMENTS**

[PCC 17.12.050]

### **A. Operational Conditions During Testing**

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.

- B. 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 17.12.050.B.

### **C. 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 17.12.050.D and the Arizona Testing Manual.

### **D. Stack Sampling Facilities**

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

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

**E. 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 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.

**F. 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.

**XVIII. PROPERTY RIGHTS**

[PCC 17.12.180.A.8.d]

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

**XIX. SEVERABILITY CLAUSE**

[PCC 17.12.180.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.

**XX. PERMIT SHIELD**

[PCC 17.12.310]

Compliance with the conditions of this permit shall be deemed compliance with any applicable requirement identified in the permit as of the date of permit issuance, provided that such applicable requirements are included and expressly identified in the permit. The permit shield shall not apply to any change made pursuant to XV.B of this Part A and XVI of this Part A.

**XXI. ACCIDENT PREVENTION REQUIREMENTS UNDER THE CLEAN AIR ACT (CAA Section 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 Section 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.

**XXII. ASBESTOS REQUIREMENTS (Demolition/ Renovation)**

[40 CFR 61, Subpart M]

Should this stationary source, pursuant to 40 CFR 61, Subpart M become subject to the National Emission Standards for Hazardous Air Pollutants - Asbestos for asbestos regulations when conducting any renovation or demolition at this premises, then the Permittee shall submit proper notification as described in 40 CFR 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.

**XXIII. STRATOSPHERIC OZONE DEPLETING SUBSTANCES**

[40 CFR 82 &amp; 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**

(All references are to Title 17 of the Pima County Code unless otherwise noted)

**I. Applicability**

The source covered by this permit constitutes a major source of NO<sub>x</sub> & CO and a true minor source of all other criteria pollutants and HAPs based on 8760 hours per year of operation and considering emissions from other emission units of the same SIC Code at this facility. Equipment specifically addressed by the permit is listed in Attachment 2, "Equipment List" and is for the operation of natural gas-fired turbines for pipeline compression.

Affected Emission Source Classification: **Class I; Major Stationary Source for NO<sub>x</sub> and CO; True minor for all other pollutants.**

**II. Emission Limits/Standards**

[PCC 17.12.180.A.2]

**A. Particulate Matter Standard**

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary gas turbine having a heat input rate of 4200 million Btu per hour or less in excess of the amounts calculated by the following equation: [SIP Rule 332 & PCC 17.16.340.C.1]

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

where:

- E = the maximum allowable particulate emissions rate in pounds-mass per hour.  
Q = the heat input in million Btu per hour.

**B. Visibility Limiting Standards**

1. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary gas turbine, smoke for any period of time greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [SIP Rule 321 & PCC 17.16.340.E]
2. The Permittee shall not cause or permit the airborne diffusion of visible emissions beyond the property boundary line without appropriately controlling the emissions at the point of discharge. [SIP Rule 343 & PCC 17.16.050.D]

**C. Fuel Limitation**

The Permittee shall combust only pipeline quality natural gas in the turbine fuel sulfur content <0.80 % by weight). [PCC 17.12.180.A.2]

**[Material Permit Condition]****D. Odor Limiting Standard**

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

[SIP Rule 344 &amp; PCC 17.16.030]

**III. Monitoring and Recordkeeping Requirements**

[PCC 17.12.180.A.3 &amp; 4]

**A. Particulate Matter Standard**

A demonstration to show compliance with the emission limitation for particulate matter in II.A shall not be required unless the Control Officer has reason to believe that conditions may exist which have the potential to cause a violation of the applicable requirement. The Permittee shall operate and maintain the turbines at all times - including periods of startup, shutdown, and malfunction - in a manner consistent with good air pollution control practices and established EPNG maintenance practices for minimizing emissions.

**B. Visibility Limiting Standards**

1. The Permittee shall conduct a visible emissions check on the exhaust stack of each turbine at least quarterly. For the purposes of this permit, a visible emissions check is verification that abnormal emissions are not present at the turbine(s) stack(s). If the turbine is not in operation at the time of the emissions check, the Permittee does not have to set the turbine in operation to conduct the visible emissions check; instead, the Permittee shall document that the turbine was not in operation. The Permittee shall also operate and maintain the turbines at all times – including periods of startup, shutdown and malfunction – in a manner consistent with good air pollution control practices and established EPNG maintenance practices. The Permittee shall record the date and time of the check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required). All records shall be maintained for five years.
2. If the observer sees visible emissions from the turbine that, on an instantaneous basis, appears to exceed 40% or; a visible emissions plume crossing property boundaries that is greater than or equal to 20% opacity, then the Permittee shall, if practicable, take a six-minute Method 9 observation of the plume. If the emissions are more than the referenced limitation and standard in II.B.1 and II.B.2 respectively, then this occurrence shall be recorded and reported as an excess emission and a permit deviation.
3. When required, the Permittee shall perform visible emissions observations in accordance with EPA Method 9, Appendix A in 40 CFR 60, to demonstrate compliance with the visibility limiting standards.

[PCC 17.16.040]

**C. Fuel Limitation**

The Permittee shall record daily the sulfur content and lower heating value of the fuel being fired in the turbines.

[PCC 17.16.340.I]

[The Permittee shall be considered in compliance with the fuel limitation conditions in II.C and III.C of Part B by demonstrating that only pipeline quality natural gas was fired in each turbine listed. Such a demonstration may be made by making available to the Control Officer for his inspection, documentation, such as invoices or statements from the fuel supplier, showing that only pipeline quality natural gas was purchased for use in the equipment or a copy of the Federal Energy Regulatory Commission (FERC) approved Tariff agreement that limits transmission to pipeline quality natural gas of sulfur content less than 0.9 percent by weight. All records shall be maintained for five years.]

D. Odor Limiting Standard

Monitoring for odors at the facility to determine compliance with the standard in II.D of Part B, is not normally necessary as the use of good modern practices prevents the emission of odors beyond the property boundary. The Control Officer may ask the Permittee to test for odor emissions if the Control Officer has reasonable cause to believe a violation of a standard has been committed. [PCC 17.12.010]

E. Operational Hours

The Permittee shall record the hours of operation of each turbine. This information shall be recorded until such time when the 360 cumulative operating hours within the permit term for an individual turbine is triggered for conducting a performance test.

F. Posting of Permit & Records

The Permittee may retain all records relating to this permit, and a copy of the permit at 5151 E Broadway, Suite 1680, Tucson, AZ 85711. The Permittee shall comply with the permit posting requirements of IV of Part A. All records shall be maintained in accordance with the requirements of XII. of Part A.

**IV. Reporting Requirements**

[PCC 17.12.180.A.5 & PCC 17.12.210]  
**[Locally Enforceable Conditions]**

A. Special Reporting for the Affected Source or Process

[PCC 17.12.180.A.5.b]

The Permittee shall promptly submit written reports to the Control Officer of any instances of deviation from permit requirements. (Refer to XIII of Part A).

B. Semiannual Reports of Required Monitoring

[PCC 17.12.180.A.5.a]

The Permittee shall submit a semiannual report of all required monitoring activities required by III of Part B (including all permit deviations and exceedances that have occurred during the reporting period). Semiannual reports shall be due on January 31st and July 31st of each year and shall cover the period July 1st through December 31st and January 1st through June 30th, respectively. The first semiannual report may not cover a six-month period. If there are no deviations, excursions or exceedances in a reporting period, no report shall be required.

C. Compliance Certification Reporting

The Permittee shall submit an annual compliance certification to the Control Officer pursuant to VII of Part A. The compliance certification report shall be due January 31<sup>st</sup> of each year and shall cover the periods January 1<sup>st</sup> to December 31<sup>st</sup>. The first report after permit issuance may not cover a full 12-month period.

D. The Permittee shall notify the Control Officer in writing within 30 days of any changes to the FERC-approved Tariff agreement relating to the fuel sulfur content and lower heating value limits that occur during the term of this permit.

- E. At the time the compliance certifications pursuant to Section VII of Part A are submitted, the Permittee shall submit the following information pertaining to each one of the natural gas fired General Electric gas turbines:
  - 1. The hours of operation in the six-month compliance term. This information shall be reported until such time when the 360 cumulative operating hours are triggered for conducting a performance test;
  - 2. Until a performance test pursuant to Section V.A of this Part is completed, the Permittee shall report the status of the testing requirement.
- F. The Permittee shall report to the Control Officer any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8 percent. [PCC 17.16.340.J]
- G. Emissions Inventory Reporting [PCC 17.12.320]

Every source subject to a permit requirement shall complete and submit to the Control Officer, when requested, an annual emissions inventory questionnaire pursuant to PCC 17.12.320 of the Pima County Code. (See VI of Part A).

## V. Testing Requirements

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. The Permittee shall conduct one set of performance tests on a turbine if the cumulative hours of operation of the individual unit during the permit term exceeds 360 hours. These performance tests shall be completed within six months prior to permit expiration. Should a turbine exceed the 360 operating hour trigger for testing during the final six months of the permit term, the Permittee shall conduct a set of performance tests on the unit no later than six months following the trigger date. The Permittee shall not be required to performance test a turbine if it does not exceed the 360 cumulative operating hour trigger during the permit term. Each set of performance tests required by this provision shall include all of the pollutants listed in Section V.B of Part B.
- B. The Permittee shall use the following EPA approved reference test methods to conduct performance tests for the specified pollutants:
  - 1. Nitrogen Oxides. EPA Reference Method 20.
  - 2. Carbon Monoxide. EPA Reference Method 10.

The Permittee may submit in a test plan an alternate and equivalent test method(s) that is listed in 40 CFR Part 60, Appendix A, to the Control Officer, for approval by the Control Officer.

- C. Testing for odors at the facility to determine compliance with the standard in II.D of Part B, is not normally necessary because the use of good modern practices prevents the emission of odors beyond the property boundary. The Control Officer may require the Permittee to test for odor emissions if the Control Officer has reasonable cause to believe a violation of a standard has been committed. [PCC 17.20.010]
- D. When required, the percentage of sulfur in fuel shall be determined by ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases.) [PCC 17.16.340.K.1.c]

**VI. Facility Changes**

Should the Permittee desire to change the facility or operations in any way (including, but not limited to, addition of new equipment, modification of current equipment or usage of fuels not specified within this permit), the Permittee shall first submit the proper notifications and follow the required permit revision procedure pursuant to PCC 17.12.230, PCC 17.12.255, or PCC 17.12.260.

Proposed Permit

## ATTACHMENT 1: APPLICABLE REGULATIONS

### Requirements Specifically Identified as Applicable

Compliance with the terms contained in this permit shall be deemed compliance with the following *federally applicable requirements* in effect on the date of permit issuance:

Pima County SIP:

Rule 321	Emissions-Discharge Opacity Limiting Standards Standards and Applicability (Includes NESHAPS)
Rule 332	Compilation of Mass Rates and Concentrations (Includes NESHAPS)
Rule 343	Visibility Limiting Standard
Rule 344	Odor Limiting Standards

Compliance with the terms contained in this permit shall be deemed compliance with the following *non-federally applicable requirements* in effect on the date of permit issuance:

Pima County Code (PCC) Title 17, Chapter 17.16.:

17.16.010	Local Rules and Standards – Applicability of More Than One Standard
17.16.020	Noncompliance With Applicable Standards
17.16.030	Odor Limiting Standards
17.16.040	Standards and applicability (includes NESHAP)
17.16.050	Visibility Limiting Standard
17.16.060	Fugitive Dust Producing Activities
17.16.080	Vacant Lots and Open Spaces
17.16.090	Roads and Streets
17.16.100	Particulate Materials
17.16.110	Storage Piles
17.16.130	Applicability
17.16.340	Standards of Performance for Stationary Rotating Machinery
17.16.400	Organic Solvents and Other Organic Materials
17.16.450	Off-Road Machinery
17.16.470	Roadway and Site Cleaning Machinery

Pima County Code (PCC) Title 17, Chapter 17.20:

17.20.010	Source Sampling, Monitoring and Testing
17.20.040	Concealment of Emissions

Pima County Code (PCC) Title 17, Chapter 17.24:

17.24.020	Recordkeeping for Compliance Determination
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### Requirements Specifically Identified As Not Applicable

As requested by the Permittee, specific non-applicable requirements have been identified as follows. A permit shield is granted from these requirements.

40 CFR 60, Subpart GG - New Source Performance Standards - Stationary Gas Turbines
PCC 17.16.490 - New Source Performance Standards - Stationary Gas Turbines

**ATTACHMENT 2**

**EQUIPMENT LIST**

<b>Unit ID</b>	<b>Type Of Equipment</b>	<b>Make</b>	<b>Model</b>	<b>Serial Number</b>	<b>Maximum Rated Capacity Hp <sup>1</sup> (Fuel rate) <sup>2</sup></b>	<b>Fuel Type</b>	<b>Date of Installation</b>
A-1	Turbine	General Electric	GE M3002-RA	95062	5290 Hp (79.7 MM Btu/hr)	Natural Gas	September 1953
A-2	Turbine	General Electric	GE M3002-RA	95065	5290 Hp (79.7 MM Btu/hr)	Natural Gas	October 1953
A-3	Turbine	General Electric	GE M3002-RA	95067	5290 Hp (79.7 MM Btu/hr)	Natural Gas	November 1953

<sup>1</sup> Indicates nominal site horsepower; <sup>2</sup> The Maximum estimated hourly fuel rate is calculated using the maximum site horsepower (7429 Hp at 0°F) per the manufacturer's performance curves.