

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR PROGRAM

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

AIR QUALITY PERMIT

ISSUED TO

SIERRITA GAS PIPELINE LLC.

SIERRITA COMPRESSOR STATION

S. AJO WAY

TUCSON, AZ 85735

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

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

PDEQ GENERAL PERMIT NUMBER **6215**

PERMIT CLASS **II**

PERMIT EFFECTIVE: **November 14, 2017**

EXPIRATION DATE: **November 13, 2022**



Rupesh Patel, Air Permit Engineering Manager, PDEQ

SIGNATURE

TITLE

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PERMIT SUMMARY

Location Information

This air quality permit is issued for a new natural gas pipeline compressor station owned and operated by Sierrita Gas Pipeline LLC, the Permittee. The mailing address and administrative office are located at 5151 E. Broadway Blvd, Suite 1680, Tucson AZ 85711. The source is located on the parcel identified by Pima County Assessor's as 209-20-003A (Sec. 22, T.15S, R.11E).

Source Description

The activities and operations covered by this permit are air emission sources at the new natural gas compressor station which provides additional natural gas compression to the existing Sierrita pipeline. The source falls under the following standard industrial classification (SIC):

- SIC Code 4922 – Natural Gas Transmission
- North American Industry Classification System (NAICS) Code 48621

The permitted air emission sources include one Solar Mars 100 natural gas fired turbine with a site rating of 122.9 MMBtu/hr and one 1114 hp natural gas fired emergency generator.

Air Permit Information

This is a new 5-year Class II air quality permit.

The following table summarizes the potential to emit of the source. These emission values are taken from the manufacturer's predicted emission performance data and US EPA Air Pollutant Emission Factors AP-42.

Potential to Emit, tons/year ¹										
Conventional or Criteria Air Pollutant								HAP(s)		GHG
PM_{2.5}	PM₁₀	PM	NO_x	VOC	CO	SO₂	Lead	Total	Single (Formaldehyde)	CO₂e ²
3.65	3.65	3.65	32.24	18.66	33.95	1.83	Negligible	0.68	0.49	63,153

¹ Potential to emit based on gas turbine operation for 8760 hours/year and 500 hours/year of emergency generator operation.

² GHG includes CO₂, N₂O, and CH₄. Emissions are based on CO₂ equivalent (CO₂e). No hydrofluorocarbon, perfluorocarbon, or sulfur hexafluoride emissions are expected from any of the equipment.

GENERAL CONDITIONS

[References are to Title 17 of the Pima County Code [PCC] unless otherwise noted]

1. *Compliance with Permit Conditions* [PCC 17.13.020.A.7.a & b]
 - a. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes 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.

2. *Excess Emissions, Emergency Reporting* [PCC 17.13.020.A.5 & PCC 17.13.190]

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:

 - a. Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emission that includes all available information from PCC 17.13.190.B. The number to report excess emissions is **520-724-7400**. The facsimile number is **520-838-7432**.
 - b. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under 2.a above. **Send to PDEQ 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701 or e-mail to air.permits@pima.gov.**

3. *Property Rights* [PCC 17.13.020.A.7.d]

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

4. *Fee Payment* [PCC 17.13.020.A.9 & PCC 17.13.240]

The Permittee shall pay fees to the Control Officer pursuant to PCC 17.13.240.

5. *Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause* [PCC 17.13.020.A.7.c]

The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to PCC 17.12.270. 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.

6. *Duty to Provide Information* [PCC 17.13.010.G & PCC 17.13.020.A.7.e]
 - 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 shall furnish a copy of such records to the Control Officer 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.

7. *Severability Clause* [PCC 17.13.020.A.6]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

SPECIFIC CONDITIONS

[References are to Title 17 of the Pima County Code [PCC] unless otherwise noted]

SECTION 1 – GENERAL APPLICABILITY

8. *Statutory Authority* [PCC 17.11.010.B & D, PCC 17.11.090.A, PCC 17.13.010, and ARS §49-480]

Emissions from the facility, specifically the emissions from the equipment and operations described in the equipment list which fall under SIC Code 4922 are subject to enforceable limitations in the Specific Conditions of this permit. This permit is issued pursuant to (ARS) §49-480 and authorizes the construction and/or operation of the equipment and operations enumerated in the equipment list. 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 application for coverage under this permit do not constitute a "major source" within the meaning of PCC 17.04.340.A.128. Notwithstanding the above findings, this permit shall not relieve the Permittee from compliance with all local, county, state and federal laws, statutes, and codes.

9. *Permit Classification*

Class II; True Minor Source; Stationary: The permitted facility sources constitute a true minor stationary source of criteria pollutants and an area source of Hazardous Air Pollutants (HAPs), when considering the operating and emission limitations in this permit and emissions from other sources at the facility aggregated under the same SIC Code (4922).

10. *Permitted Facility Sources*

The Specific Conditions contained in this permit apply to the equipment listed in Attachment 2 that fall under the following source categories, affected facilities, equipment, installations, activities, or operations at the facility. Refer to Section 7 of this permit for conditions relating the specific applicability of this permit to the permitted sources.

- a. Stationary Combustion Turbine(s)
- b. Internal Combustion Engine(s) (Emergency Generators)
- c. Crude Oil and Natural Gas Facilities – Collection of GHG and VOC Fugitive Emission Components

11. *Permit Sections*

The Specific Conditions have been organized into the following permit sections:

- Section 1 General Applicability (This Section);
- Section 2 Facility-Wide Operations;
- Section 3 NSPS Subpart KKKK for Stationary Combustion Turbines;
- Section 4 NSPS Subpart JJJJ for SI ICE (Emergency Designated Engines);
- Section 5 NSPS Subpart OOOOa for Crude Oil and Natural Gas Facilities;
- Section 6 Fugitive Dust Requirements; and
- Section 7 Specific Applicability

12. *Applicability of more than one standard* [PCC 17.16.010.B]

If more than one emission limit or emission standard in this permit is applicable to the same source, the more stringent standard or emission limit shall apply. **[Locally Enforceable Condition]**

SECTION 2 – FACILITY-WIDE OPERATIONS

In accordance with condition 75.a, the provisions in this Section apply to facility-wide operations and all sources of air contaminants. All provisions in this Section are locally enforceable unless otherwise noted. [PCC 17.16.010.B]

Emission Limitations and Standards

[PCC 17.13.020.A.2]

13. *Operating Limitations*

[Material Permit Conditions]

The Permittee shall comply with the operating limitations in Section 4 of this permit and the following requirements in order to avoid federal or other applicable requirements:

- a. The Permittee shall monitor and keep sufficient records to demonstrate that the emission rate of air pollutants from sources covered by this permit and any other permitted sources located within the contiguous or adjacent areas under the common control of the Permittee do not exceed the major source threshold. [PCC 17.13.010.B.2]

14. *General Control Standards*

[PCC 17.11.020, PCC 17.13.020.A.2 & PCC 17.16.020.B]

- a. The Permittee shall not cause or permit the planning, construction, installation, erection, modification, use or operation of an emission source which will cause or contribute to a violation of a performance standard in Title 17 of the Pima County Code.
- b. The Permittee is prohibited from firing high sulfur oil in any stationary or portable source. Notwithstanding the prohibition to use high sulfur oil, the Specific Conditions contained in this permit may prescribe lower fuel sulfur content limits for specific stationary sources.

[Material Permit Condition]

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

15. *Materials Handling Standards*

- a. The Permittee shall not transport or store VOC's without taking necessary and feasible measures to control evaporation, leakage, or other discharge into the atmosphere. [PCC 17.16.400.A]
- b. Petroleum liquid storage tanks shall be equipped with a submerged filling device or acceptable equivalent for the control of hydrocarbon emissions. [PCC 17.16.230.B]
- c. Materials including solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizers and manure shall be processed, stored, used and transported in such a manner and by such means that they will not evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices, or equipment shall be mandatory. [PCC 17.16.430.F]

16. *Odor Limiting Standard*

[PCC 17.16.430.F & PCC 17.16.030]

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. Emissions from malodorous matter shall not cross a property line without minimizing emissions by applying good modern practices. Malodorous matter shall include but not be limited to materials in condition 15.c.

17. *Opacity Standards*

[Federally Enforceable When Opacity Is Above 40%]

- a. The opacity of an emission from any nonpoint source shall not exceed 20%. [PCC 17.16.050.B.2]
- b. Except as otherwise specified in the Specific Conditions, or the Table in Attachment 2, the average optical density of plumes and effluents from a single point, multiple emission point, or fugitive emission source shall not exceed 20% opacity. [PCC 17.16.040 & PCC 17.16.130.B.1]
- c. Opacities (optical densities), as measured in accordance with Method 9, of an effluent shall be measured by a certified visible emissions evaluator with his/her natural eyes, approximately following the procedures which were used during his/her certification, or by an approved and precisely calibrated in-stack monitoring instrument. [PCC 17.16.040.A.1]
- d. 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 in this permit. 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 Attachment 2 to this permit. 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. [PCC 17.16.040.A.2]
- e. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited. [PCC 17.16.040.A.3]
- f. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements as specified in conditions 17 and 18, conditions 17 and 18 shall not apply. [PCC 17.16.040.B]

18. *Visibility Limiting Standard*

[PCC 17.16.050.A & D]

- a. The Permittee shall not cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne in accordance with condition 20.a and Section 6 of this permit as applicable.
- b. 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 in accordance with Section 6 of this permit.
 - i. Condition 18.b 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.
 - ii. Condition 18.b shall not apply to the generation of airborne particulate matter from undisturbed land.

19. *Disposition of Portable Sources*

No conditions. No portable sources will be located at the facility.

20. *Requirement to Obtain Applicable 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 for Demolition and Renovation Activities*

The Permittee shall not allow or commence demolition or renovation of any NESHAP facility, as defined in 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants – Asbestos, without first obtaining an activity permit from the Control Officer. Should this stationary source, pursuant to 40 CFR Part 61, Subpart M, become subject to asbestos regulations when conducting any renovation or demolition at this premises, then the Permittee or operator shall submit proper notification as described in 40 CFR Part 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. [PCC 17.14.060 & 40 CFR 61, Subpart M]

c. *Open Burning Permits*

The Permittee shall not ignite, cause to be ignited, permit 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 17.14.080.C. [PCC 17.14.080]

Monitoring Requirements

[PCC 17.13.020.A.3]

21. *Visible Emissions (VE)*

If at any time, or while conducting an opacity check required by the Specific Conditions in this permit, the Permittee sees any plume or effluent from a facility source, that on an instantaneous basis, appears to exceed the opacity limit, or if visible emissions including fugitive dust, diffuse beyond the property boundary line, the Permittee shall investigate the source of the emissions and, if required take corrective action. If the plume persists, or the equipment, activity or operation which is causing or contributing to the emissions cannot be corrected or halted, the Permittee shall make a visual determination of the opacity in accordance with condition 17 when practicable. If the VE determination exceeds the applicable opacity limit, or if visible emissions, including fugitive dust, diffuse beyond the property boundary line, the Permittee shall report this as an excess emission in accordance with condition 2 of the General Conditions (pg.4). [PCC 17.16.040 & PCC 17.16.50.B]

22. *Portable Sources*

No conditions. No portable sources will be located at the facility.

23. *Additional Monitoring*

Except as provided in conditions 13, 20, 21, and 32, or as otherwise required by the Specific Conditions, additional monitoring for compliance with the facility-wide standards in this Section shall not be necessary. The Control Officer may ask the Permittee to conduct additional monitoring if the Control Officer has reasonable cause to believe a violation of the facility-wide standards has been committed.

Recordkeeping Requirements

[PCC 17.13.020.A.4]

24. *Monitoring Records*

[PCC 17.13.020.A.4.a]

The Permittee shall maintain records of required monitoring information. Records shall include at a minimum:

- a. The date, time, and the place defined in the permit requiring the measurement, sampling, inspection, or observation;
- b. The name of the person conducting the measurement, sampling, inspection or observation;
- c. The particular piece of equipment, process, or area being measured, sampled, inspected or observed including a description of the operating conditions and monitoring techniques or methods used as applicable; and,
- d. The results of the measurement, sampling, inspection or observation, including any discrepancy or excess emissions. If there are any monitoring discrepancies or excess emissions, the records shall include the corrective actions taken.

25. *Record Retention*

[PCC 17.13.020.4.b]

The Permittee shall retain records of all required monitoring and support information for at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, and copies of all reports required by the permit.

26. *Recordkeeping for Compliance Determination*

[A.R.S.§49-485, PCC 17.11.060, & PCC 17.24.020.A]

The Permittee shall retain a copy of the permit onsite including all required monitoring records and support information for review by the Control Officer. In addition, all equipment identified in the permit equipment list shall be marked with a unique, clearly visible, and accessible ID to identify the piece of equipment. The Permittee shall be considered in compliance by demonstrating that sufficient information on the equipment and facility operations is periodically collected, recorded, and maintained to assure that the compliance status of any Specific Condition of this permit can be readily ascertained at any time.

Reporting Requirements

[PCC 17.13.020.A.5]

27. *Excess Emissions Reporting*

[PCC 17.13.190]

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit in accordance with condition 2.

28. *Emissions Inventory Reporting*

[PCC 17.13.180]

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 request and inventory form available, whichever occurs later, and shall include emission information for the previous calendar year. The questionnaire shall be on a form provided by or approved by the Control Officer and shall include the information required by PCC 17.13.180.

29. *Certification of Truth Accuracy and Completeness*

[PCC 17.13.010.H]

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

Facility Changes

[PCC 17.13.100, PCC 17.13.110.C.3, PCC 17.13.130 & PCC 17.13.140]

30. *Application to Revise Permit*

Before installing additional emission sources, modifying existing emission sources, switching fuels, or changing the method of operation at the facility such that the changes increase actual emissions more than 10% of the major source threshold, the Permittee shall apply to revise the permit in accordance with PCC 17.13.100, PCC 17.13.130, or PCC 17.13.140.

31. *Notification*

[PCC 17.13.110.C]

For facility changes that do not require revision, the Permittee may make the changes if written notice is provided to the Control Officer in advance of the changes in accordance with PCC 17.13.110.C

32. *Facility Change Log*

[PCC 17.13.110.B]

The Permittee shall maintain a log of other facility changes that do not require revision or notice in accordance with PCC 17.13.110.B.

Testing Requirements

[PCC 17.11.160, PCC 17.11.210 & PCC 17.20.010]

33. Except where otherwise specified in the Specific Conditions in this permit, the Permittee shall follow these provisions and test methods. The methods and standards referenced below are from Appendix A of 40 CFR Part 60 or incorporated by reference in 40 CFR §60.17.

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 alternative method ALT-082 to monitor compliance with the opacity standards identified in this permit.

[PCC 17.11.160.B]

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) that is listed in 40 CFR Subpart 60, Appendix A, to the Control Officer in a test plan, for approval by the Control Officer.

d. *Test Protocols and Guidelines*

Should the Permittee desire, or be required, to conduct performance tests to demonstrate compliance with the standards contained in this permit, the Permittee shall contact the Control Officer for test methods, protocols, and guidelines.

e. *Enforcement*

Notwithstanding any other provision in this permit, any credible evidence or information relevant as to whether the source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed can be used to establish whether or not the Permittee has violated or is in violation of any standard or applicable emission limit in this permit.

SECTION 3 – NSPS SUBPART KKKK FOR NEW STATIONARY COMBUSTION TURBINES

In accordance with condition 75.b, the provisions in this Section are applicable to the stationary combustion turbine identified in the equipment list in Attachment 3. In addition to the following provisions, the general provisions of 40 CFR Part 60 apply to affected stationary gas turbines, as applicable. All provisions in this section are federally enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.13.020.A.2]

34. *Emission Limitations*

a. *Nitrogen Oxides Standard*

The stationary combustion turbine must meet the following emission limits for NO_x:

- i. 25 ppm at 15% Oxygen; or
- ii. 150 ng/J of useful output (1.2 lb/MWh). [40 CFR 60.4320, Row 3 of Table 1 to 40 CFR Part 60, Subpart KKKK]

b. *Fuel Limitation/Sulfur Dioxide Standard*

The Permittee shall not burn any fuel in the stationary combustion turbine which contains total potential sulfur emissions in excess of 26 ng SO₂/J (0.060 lb SO₂/MMBtu) heat input. To comply with this provision, the Permittee shall only burn pipeline quality natural gas in the stationary combustion turbine.

[40 CFR 60.4330(a)(2), PCC 17.11.120.A.3.a, PCC 17.16.340.H]

[Material Permit Condition]

c. *Particulate Matter Standard*

The stationary combustion turbine shall not emit particulate matter in excess of the following equation:

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

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

Q = the heat input in million BTU/hour.

[PCC 17.16.340.C.1]

[Locally Enforceable Condition]

d. *Opacity Standard*

The opacity of emissions from the stationary combustion turbine shall not exceed the facility-wide opacity limits in condition 17.b. In addition, the Permittee shall not cause or permit to be emitted into the atmosphere from stationary rotating machinery smoke for any period 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.

[PCC 17.16.040, PCC 17.16.130.B & PCC 17.16.340.E]

[Federally Enforceable when opacity is above 40%]

e. *General Compliance Requirement*

The Permittee must operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [40 CFR 60.4333(a)]

Compliance Determination

[PCC 17.13.020.A.3, 4 & 5]

35. *Emission Limitations*a. *Nitrogen Oxides Standard:*i. *Initial Performance Test*

Except as provided in 40 CFR 60.8, within 60 days after achieving the maximum production rate at which the stationary gas turbine will be operated, but not later than 180 days after initial startup, or at such other times as may be required by the Control Officer, the Permittee shall conduct performance test(s) as provided in condition 37 to demonstrate compliance with the emission limitation in condition 34.a. [40 CFR 60.8(a) & PCC 17.11.210.A]

ii. *Subsequent Performance Testing*

To demonstrate continuous compliance with condition 34.a, the Permittee shall perform annual performance tests as provided in condition 37. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, the Permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, the Permittee must resume annual performance tests. [40 CFR 60.4340(a)]

b. *Fuel Limitation/Sulfur Dioxide Standard*

To demonstrate continuous compliance with condition 34.b, the Permittee shall maintain documentation of the natural gas characteristics in a current, valid purchase contract, tariff sheet or transportation contract, specifying that the total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a) & PCC 17.13.010.B.2]

[Material Permit Condition]c. *Particulate Matter, Opacity, and General Compliance Requirements*

A demonstration to show compliance with the standards in conditions 34.c, d and e shall not be required unless the Control Officer has reason to believe that conditions exist which may have the potential to cause a violation. In practice requiring such a demonstration shall be based on whether acceptable operating and maintenance procedures are being used, and other information available to the 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) & PCC 17.13.010.B.2]

36. *Notification, Reporting and Recordkeeping Requirements*a. *Initial Startup Notification*

The Permittee shall submit a notification to the Control Officer of the actual date of initial startup of the stationary combustion turbine postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]

b. *Performance Testing and Reporting for Oxides of Nitrogen*

i. The Permittee shall provide the Control Officer at least 30 days prior notice of any performance test of the stationary gas turbine to afford the Control Officer the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational 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)]

- ii. At least 14 calendar days prior to performing the initial performance test, the Permittee shall submit a test plan for the stationary combustion turbine to the Control Officer in accordance with the Arizona Testing Manual. Upon approval of the test plan, plan submittals for subsequent performance testing shall not be required unless elements of the approved plan have changed. Subsequent notifications of annual performance tests as required in condition 36.b.i shall include requests for approval of any test plan elements that have changed or variances from the approved plan. For the purpose of this provision, test plans submitted by the Permittee or authorized representative shall be deemed to be approved unless the Control Officer notifies the Permittee in writing that the test plan is incomplete. [PCC 17.11.210.B]
- iii. The Permittee must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.8 & PCC 17.11.210]

c. *Recordkeeping Requirements*

- i. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the stationary combustion turbine; any malfunction of the air pollution control equipment; or any period during which a monitoring device is inoperative. [40 CFR 60.7(b)]
- ii. The Permittee shall maintain a file of all measurements, monitoring devices, and performance testing measurements in a permanent form suitable for inspection. The file shall be retained for at least two years. [40 CFR 60.7(f)]

37. *Testing Requirements*

In addition to the requirements in condition 33, the Permittee shall conduct performance testing according to the following:

- a. The Permittee shall provide, or cause to be provided, performance testing facilities, as necessary, for the stationary gas turbine as provided in 40 CFR Part 60.8(e). [40 CFR 60.8(e) & PCC 17.11.210.E]
- b. Performance tests shall be conducted under such conditions as the Control Officer shall specify to the plant operator based on representative performance of the affected facility. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in this Section. [40 CFR 60.8]
- c. *Subpart KKKK - §60.4400 – Initial and Subsequent Testing Requirements for NO_x*
 - i. The Permittee must conduct an initial performance test, as required in 40 CFR §60.8. Subsequent NO_x performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test) or in accordance with the schedule specified in Condition 35.a.ii. [40 CFR 60.4340(a)]
 - (a) There are two general methodologies that the Permittee may use to conduct the performance tests. For each test run: [40 CFR 60.4400(a)(1)]
 - (i) Measure the NO_x concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_x emission rate. [40 CFR 60.4400(a)(1)(i)]

$$E = \frac{1.194 \times 10^{-7} * (NO_x)_c * Q_{std}}{P} \quad (\text{Eq. 5})$$

Where:

E = NO_x emission rate, in lb/MWh;

1.194 × 10⁻⁷ = conversion constant, in lb/dscf-ppm

(NO_x)_c = average NO_x concentration for the run, in ppm;

Q_{std} = stack gas volumetric flow rate, in dscf/hr;

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation); for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); **or**

- (ii) Measure the NO_x and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO_x emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO_x emission rate in lb/MWh. [40 CFR 60.4400(a)(1)(i)]
- (b) Sampling traverse points for NO_x and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points. [40 CFR 60.4400(a)(2)]
- (c) Notwithstanding condition 37.c.i(b), as stated above, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met: [40 CFR 60.4400(a)(3)]
- (i) The Permittee may perform a stratification test for NO_x and diluent pursuant to the procedures specified in section 6.5.6.1(a) through (e) of appendix A of 40 CFR Part 75.
- (ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:
- (A) If each of the individual traverse point NO_x concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO₂ (or O₂) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NO_x concentration during the stratification test; or

- (B) For turbines with a NO_x standard greater than 15 ppm @ 15% O₂, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_x concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO₂ (or O₂) from the mean for all traverse points; **or**
 - (C) For turbines with a NO_x standard less than or equal to 15 ppm @ 15% O₂, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_x concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO₂ (or O₂) from the mean for all traverse points.
- ii. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. [40 CFR 60.4400(b)]
- (a) Compliance with the applicable emission limit in condition 34.a must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_x emission rate at each tested level meets the applicable emission limit in §60.4320. [40 CFR 60.4400(b)(4)]
 - (b) The ambient temperature must be greater than 0 °F during the performance test. [40 CFR 60.4400(b)(6)]

SECTION 4 – NSPS Subpart JJJJ for SI ICE
(Emergency Designated Engines)

In accordance with condition 75.c, the provisions in this Section apply to emergency designated SI ICE identified in the equipment list in Attachment 3. The General Provisions of 40 CFR Part 60, Subpart A apply to applicable SI ICE indicated in Table 3 of 40 CFR Part 60, Subpart JJJJ. All provisions of this Section are Federally Enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.13.020.A.2]

38. *Operating Limitations*

[Material Permit Conditions]

- a. The Permittee shall not operate emergency stationary SI ICE subject to this Section more than 100 hours in any 12-consecutive month period for the purpose of maintenance and readiness testing, and non-emergency use as provided in condition 43. There is no time limit on the use of emergency engines in emergency situations.
- b. The Permittee of an emergency stationary SI ICE combustion engine that does not meet the standards applicable to non-emergency engines must install a non-resettable hour meter on each applicable stationary SI ICE prior to startup of each engine. [40 CFR 60.4237]
- c. The Permittee shall burn only the fuel(s) specified in the equipment list (Attachment 3).

[Locally Enforceable Condition]

39. *Emissions Standards*

- a. The Permittee of SI ICE that commenced construction after June 12, 2006 (date engine was ordered), or were modified or reconstructed, with the following dates of manufacture and for the applicable engine class and maximum engine power, shall comply with the applicable emission limitations in NSPS, Subpart JJJJ, §60.4231 and §60.4233 as provided below: [40 CFR 60.4231, 40 CFR 60.4233 & Table 1 to NSPS Subpart JJJJ]

Applicability for Emergency Engines

MFG Date	Max. Power	Engine Class	Applicable Regulations (Emissions Req.)
On or after 7/1/2008	HP < 25	SI ICE	40 CFR 60.4231(a) & 40 CFR 60.4233(a) (Parts 90, 1054)
On or after 1/1/2009	HP > 25 HP	Gasoline (G)	40 CFR 60.4231(b) & 40 CFR 60.4233(b) (Parts 90, 1048, 1054)
		Rich Burn LPG (RB LPG)	40 CFR 60.4231(e); 40 CFR 60.4233(e) (Parts 90, 1048)
		SI ICE (not G or RB-LPG)	40 CFR 60.4231(d),(e); 60.4233(d),(e) (Parts 90, 1048, 1054, Table 1 to Subpart JJJJ)
Prior to 1/1/2009	25 ≤ HP < 130	Modified or Reconstructed SI ICE	40 CFR 60.4233(f)(1-4)
Prior to 1/1/2009	HP ≥ 130		

Reference - Table 1 to Subpart JJJJ of Part 60 – NO_x, CO, and VOC Emission Standards

Engine Class/Types Note	Max. Power	Emission Standards ^a g/hp-hr or (ppmvd at 15% O ₂)		
		NO _x	CO	VOC ^c
Emergency ICE	25 < HP < 130	10 ^b (N/A)	387 (N/A)	N/A (N/A)
Emergency ICE	HP ≥ 130	2.0 (160)	4.0 (540)	1.0 (86)
Modified or Reconstructed Emergency ICE (not G or RB-LPG)	HP ≥ 130	3.0 (250)	4.0 (540)	1.0 (86)

- i. Owners and Operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/hp-hr or ppmvd at 15% O₂.
 - ii. ~~The emission standards applicable to emergency engines between 25 and 130 hp are in terms of NO_x + HC.~~
 - iii. For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.
- b. The Permittee must operate and maintain emergency stationary SI ICE that achieve the emission standards as required in condition 39.a over the entire life of the engine. [40 CFR 60.4234]

40. *Installation Restrictions* [40 CFR 60.4236]

- a. The Permittee may not install stationary emergency SI ICE that do not meet the applicable requirements in 40 CFR §60.4233 after the specified dates as follows: [40 CFR 60.4236(c)]
 - i. ~~For stationary SI ICE with a maximum engine power < 500 HP, after July 1, 2010.~~
 - ii. ~~For stationary SI ICE with a maximum engine power ≥ 500HP, after July 1, 2009.~~
 - iii. ~~For lean burn stationary SI ICE with a maximum engine power 500 ≤ HP ≤ 1350, after January 1, 2010.~~
 - iv. For emergency stationary SI ICE with a maximum engine power > 19 KW (25 HP), after January 1, 2011.
- b. ~~In addition to the requirements specified in 40 CFR 60.4231 and 40 CFR 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in condition 40.a, after the dates specified in condition 40.~~ [40 CFR 60.4236(d)]
- c. The requirements of condition 40 do not apply to stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location. [40 CFR 60.4236(e)]

41. *Fuel Requirements*

The Permittee shall combust only natural gas in the emergency SI ICE. [PCC 17.11.190]

42. *Opacity*

The opacity of emissions from emergency SI ICE shall not exceed the facility-wide opacity limits in condition 17.b. In addition, the Permittee shall not cause or permit to be emitted into the atmosphere from engines smoke for any period 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.

[PCC 17.16.040, PCC 17.16.130.B & PCC 17.16.340.E]

[Federally Enforceable when opacity is above 40%]

43. *Emergency Designation*

The Permittee must operate emergency stationary ICE according to the requirements in conditions 43.a through c. In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in conditions 44.a through c is prohibited. If the Permittee does not operate the engine according to the requirements in conditions 44.a through c, the engine will not be considered an emergency engine under this Section and will need to meet all requirements for non-emergency engines. [40 CFR 60.4243(d)]

- a. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4243(d)(1)]
- b. The Permittee may operate the subject emergency stationary ICE as specified in condition 43.b.i for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in condition 43.c, counts as part of the 100 per calendar year allowed by this paragraph. [40 CFR 60.4243(d)(2)]
 - i. The subject emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Control Officer for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4243(d)(2)(i)]
 - ~~ii. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [40 CFR 60.4211(f)(2)(ii)]~~
 [Vacated by U.S. Court of Appeals for the District of Columbia in Delaware vs EPA, May 4, 2016]
 - ~~iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 63.6640(f)(2)(iii)]~~
 [Vacated by U.S. Court of Appeals for the District of Columbia in Delaware vs EPA, May 4, 2016]
- c. The Permittee may operate the subject emergency stationary ICE up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing provided in condition 43.b. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a permit to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4243(d)(3)]

Compliance Determination

[PCC 17.13.020.A.3, 4, & 5]

44. Operating Limitations

For each engine in the equipment list (Attachment 3) subject to an operational hour condition, the Permittee shall record the monthly operating hours as measured through the run hour meter and recalculate the 12-consecutive month total within 10 calendar days of the end of the month.

45. Requirements for SI ICE with HP < 25, Gasoline, and Rich Burn LPG

Not applicable; the proposed emergency generator is not subject to 40 CFR 60.4233(a) through (c).

46. Requirements for SI ICE with HP > 25 HP (Excluding Gasoline and Rich Burn-LPG)

If the Permittee's SI ICE must comply with the emission standards in 40 CFR 60.4233 (d) or (e), as provided in condition 39.a, the Permittee must demonstrate compliance according to one of the methods specified in conditions 46.a and b, as stated below: [40 CFR 60.4243(b)&(c)]

a. Certified Engine

Purchasing an engine certified according to procedures in NSPS, Subpart JJJJ for the same model year. Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the Permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. The Permittee must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply. If the Permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(b)(1)]

b. Non-Certified Engine

Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the testing requirements in condition 55, as applicable, and according to conditions 46.b.i and ii, as stated below:

i. If the SI ICE $25 < HP \leq 500$

Not applicable; the proposed engine is greater than 500 HP.

ii. If the SI ICE $HP > 500$

The Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(b)(2)(ii)]

47. Requirements for Modified or Reconstructed SI ICE:

If the Permittee must comply with the emission standards specified in §60.4233(f), as provided in condition 39.a, the Permittee must demonstrate compliance according condition 46.b, except that if complying according to condition 46.b.i (i.e. for all engines > 25 HP), the Permittee demonstrates that the non-certified engine complies with the emission standards.

48. Temporary use of Propane in Natural Gas Fired Engines

Not applicable. Only natural gas fuel will be used.

49. *AFR Controller Operation and Maintenance*

The applicable SI ICE is not required to install an AFR controller.

50. *Emergency and Non-Emergency Service - Times of Operation*

[40 CFR 60.4245(b)]

For stationary SI emergency ICE with maximum engine power greater than or equal to 500 HP and manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

51. *Opacity*

No monthly visible emissions checks are required for stationary engines that only fire natural gas or LPG (Propane).

[PCC 17.13.020.A.3.c]

[Locally Enforceable Condition]

52. *Fuel Requirements*

For engines in the equipment list (Appendix 3) that fire natural gas or LPG, the Permittee may demonstrate that only commercially available natural gas or LPG fuel was fired by making available to the Control Officer for inspection, documentation, such as invoices or statements from the fuel supplier, showing that natural gas or LPG was purchased for use in the equipment. Alternatively, the demonstration may be made by actual inspection of the equipment showing that natural gas is plumbed to the equipment for firing. [PCC 17.13.020.A.3.c]

[Locally Enforceable Conditions]

53. *Notifications, Reports and Records*

a. *Run Hour Records*

The Permittee must keep the following:

- i. The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)]

b. *Records of Notifications, Maintenance, and Emissions Information*

The Permittee must keep records of the information in paragraphs i through iv.

[40 CFR 60.4245(a)]

- i. All notifications submitted to comply with this Section and all documentation supporting any notification.
- ii. Maintenance conducted on the engine.
- iii. If the stationary SI ICE is a *Certified Engine*, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060 as applicable.
- iv. If the stationary SI ICE is a *Non-Certified* engine or is a certified engine operating in a non-certified manner and subject to condition 46.b, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4) & 40 CFR 60.4243(a)(2)]

c. *Notification Required for Non-Certified stationary SI ICE with HP ≥ 500*

For all stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 as provided in condition 39.a, the Permittee must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the information below: [40 CFR 60.4245(c)]

- i. Name and address of the Permittee;
- ii. The address of the affected source;
- iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- iv. Emission control equipment; and
- v. Fuel used

54. *Annual Report to EPA*

No Applicable Conditions

Testing Requirements

[PCC 17.11.160, PCC 17.11.210 & PCC 17.20.010]

55. *SI ICE Performance Testing*

The Permittee shall follow the provisions in condition 33 in addition to the following:

- a. If required to conduct performance testing, the Permittee must follow the procedures in paragraphs (a) through (f) of 40 CFR 60.4244. [40 CFR 60.4244(a)]
- b. For all SI ICE that are subject to performance testing, the Permittee must submit a copy of each performance test as conducted in 40 CFR §60.4244 within 60 days after the test has been completed.

[40 CFR 60.4245(d)]

SECTION 5 – NSPS SUBPART OOOOa FOR CRUDE OIL AND NATURAL GAS FACILITIES

In accordance with condition 75.d, the provisions for fugitive green-house gas (GHG) and VOC emissions in this Section apply to the collection of fugitive emissions components at the compressor station. The General Provisions of 40 CFR Part 60, Subpart A apply to affected facility as indicated in Table 3 of 40 CFR Part 60, Subpart OOOOa. All provisions of this Section are Federally Enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.13.020.A.2]

56. Compliance Date

[40 CFR 60.5370a & PCC 17.13.020.A.2]

The Permittee must be in compliance with the standards in this Section by August 31, 2017 or upon startup of the compressor station whichever is later. (Note: The standards have been stayed until August 31, 2017)

a. Severability Clause

The specific requirements in this Section shall be voided to the same extent that the underlying requirements in 40 CFR Part 60, Subpart OOOOa become unenforceable by the Administrator of the EPA as a result of any action by a federal court, Congress, or a new final action by the Administrator of the EPA.

[PCC 17.04.270 & PCC 17.13.020.A.6]

57. General Compressor Station Operation and Maintenance Standard

At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate any affected facility 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 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. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this Section.

[40 CFR 60.5370a(b)]

58. GHG and VOC Fugitive Emissions Components Standard

The Permittee must monitor all fugitive emission components, as defined in condition 58.a, as stated below, in accordance with conditions 59 through 61. The Permittee must repair all sources of fugitive emissions in accordance with condition 62. The Permittee must keep records in accordance with condition 65 and report in accordance with condition 66. For purposes of this Section, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.

[40 CFR 60.5397a(a)]

- a. For the purpose of this Section, “fugitive emissions component” means any component that has the potential to emit fugitive emissions of methane or VOC at the compressor station, including but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to 40 CFR §60.5411a, thief hatches or other openings on a controlled storage vessel not subject to §60.5395a, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.

[40 CFR 60.5430a - Definitions]

59. *Fugitive Emission Components Monitoring Plan*

[40 CFR 5397a(b)]

The Permittee must develop an emissions monitoring plan that covers the collection of fugitive emissions components at the compressor station within each company-defined area in accordance with the following:

a. *Required Plan Elements*

[40 CFR 5397a(c)]

The fugitive emissions monitoring plan must include the following elements:

- i. Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by conditions 60 and 61 of this section.
- ii. Technique for determining fugitive emissions (i.e., Method 21 at 40 CFR part 60, appendix A-7, or optical gas imaging).
- iii. Manufacturer and model number of fugitive emissions detection equipment to be used.
- iv. Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. The repair schedule must meet the requirements of condition 62.
- v. Procedures and timeframes for verifying fugitive emission component repairs.
- vi. Records that will be kept and the length of time records will be kept.
- vii. *Optical Gas Imaging* [40 CFR 5397a(c)(7)]

If the Permittee uses optical gas imaging, the plan must also include the following elements specified in (a) through (g), as stated below:

- (a) Verification that the optical gas imaging equipment meets the following specifications. This verification is an initial verification and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitives emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.
 - (i) The optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions.
 - (ii) The optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 g/hr from a quarter inch diameter orifice.
- (b) Procedure for a daily verification check.
- (c) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.
- (d) Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.
- (e) Procedures for conducting surveys, including the following items:
 - (i) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.

- (ii) How the operator will deal with adverse monitoring conditions, such as wind.
- (iii) How the operator will deal with interferences (e.g., steam).
- (f) Training and experience needed prior to performing surveys.
- (g) Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

viii. *Method 21*

[40 CFR 5397a(c)(8)]

If the Permittee uses Method 21 of 40 CFR 60, Appendix A-7, the plan must also include the following elements specified in (a) and (b), as stated below. For the purposes of complying with the fugitive emissions monitoring program using Method 21, a fugitive emission is defined as an instrument reading of 500 ppm or greater.

- (a) Verification that the monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If the Permittee wishes to use an analyzer other than a FID-based instrument, the Permittee must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to your compound of interest). [40 CFR 5397a(c)(8)(i)]
- (b) Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR Part 60, Appendix A-7, including Section 8.3.1. [40 CFR 5397a(c)(8)(ii)]

b. *Minimum Plan Elements*

[40 CFR 5397a(c)]

Each fugitive emissions monitoring plan must include the following elements at a minimum, as applicable:

[40 CFR 5397a(d)]

- i. Sitemap.
- ii. A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences.
- iii. If using Method 21, the Permittee’s plan must also include a list of fugitive emissions components to be monitored and method for determining location of fugitive emissions components to be monitored in the field (e.g. tagging, identification on a process and instrumentation diagram, etc.).
- iv. The Permittee’s plan must also include the written plan developed for all of the fugitive emission components designated as difficult-to-monitor in accordance with condition 61.b, and the written plan for fugitive emission components designated as unsafe-to-monitor in accordance with condition 61.c.

60. *Initial Monitoring Survey*

[40 CFR 60.5397a(e) & (f)(2)]

The Permittee must conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each new collection of fugitive emissions components or by the compliance date in condition 56, whichever is later. For a modified collection of fugitive components at a compressor station, the initial monitoring survey must be conducted within 60 days of the modification or by the compliance date in condition 56, whichever is later. Each monitoring survey shall observe each fugitive emissions component for fugitive emissions as provided in condition 58.

61. *Subsequent Monitoring Surveys*

[40 CFR 60.5397a(g)]

A monitoring survey of each collection of fugitive emissions components at a compressor station must be performed at the frequency specified in condition 61.a, with the exceptions noted in conditions 61.b and c, as stated below.

a. *Quarterly Survey Requirement*

[40 CFR 60.5397a(g)(2)]

A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.

b. *Difficult-to-Monitor Components*

[40 CFR 60.5397a(g)(3)]

Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the following specifications:

- i. A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by condition 59.
- ii. The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.
- iii. The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.
- iv. The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.

c. *Unsafe-to-Monitor Components*

[40 CFR 60.5397a(g)(4)]

Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications:

- i. A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by condition 59.
- ii. The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.
- iii. The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.
- iv. The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

d. *Waiver of Quarterly Survey Periods with Low Temperatures* [40 CFR 60.5397a(g)(5)]

The requirements of condition 61.a are waived for any collection of fugitive emissions components at a compressor station located within an area that has an average calendar month temperature below 0°Fahrenheit for two of three consecutive calendar months of a quarterly monitoring period. The calendar month temperature average for each month within the quarterly monitoring period must be determined using historical monthly average temperatures over the previous three years as reported by a National Oceanic and Atmospheric Administration source or other source approved by the Control Officer. The requirements of condition 61.a shall not be waived for two consecutive quarterly monitoring periods.

62. *Repair Requirements* [40 CFR 60.5397a(h)]

- a. Each identified source of fugitive emissions shall be repaired or replaced in accordance with 63.a.i and ii, as stated below.
- i. Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions. [40 CFR 60.5397a(h)(1)]
 - ii. If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier. [40 CFR 60.5397a(h)(2)]
- b. Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions. [40 CFR 60.5397a(h)(3)]
- i. For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions.
 - ii. For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken, must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).
 - iii. Operators that use Method 21 to resurvey the repaired fugitive emissions components are subject to the following resurvey provisions:
 - (a) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 are used.
 - (b) Operators must use the Method 21 monitoring requirements specified in condition 59.a.viii.(b) or the alternative screening procedures specified in section 8.3.3 of Method 21.
 - iv. Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the following resurvey provisions:
 - (a) A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.
 - (b) Operators must use the optical gas imaging monitoring requirements specified in condition 59.a.vii.

Compliance Determination

[PCC 17.13.020.A.3, 4, & 5]

63. Initial Compliance

The Permittee must determine initial compliance for the compressor station using the following requirements. The initial compliance period begins on the compliance date in condition 56 and ends no later than 1 year after the compliance date in condition 56. The initial compliance period may be less than one full year. To achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a compressor station, the Permittee must comply with the following: [40 CFR 60.5410a(j)]

- a. The Permittee must develop a fugitive emissions monitoring plan as required in condition 59.
- b. The Permittee must conduct an initial monitoring survey as required in condition 60.
- c. The Permittee must maintain the records in condition 65.
- d. The Permittee must repair each identified source of fugitive emissions for each affected facility as required in condition 62.
- e. The Permittee must submit the initial annual report for each collection of fugitive emissions components at a compressor station as required in condition 66.

64. Continuous Compliance

For each collection of fugitive emissions components at a compressor station, the Permittee must demonstrate continuous compliance with the fugitive emission standards in this section according to the following: [40 CFR 60.5415a(h)]

- a. The Permittee must conduct periodic monitoring surveys as required in condition 61.
- b. The Permittee must repair or replace each identified source of fugitive emissions as required in condition 62.
- c. The Permittee must maintain the records in condition 65.
- d. The Permittee must submit annual reports for collection of fugitive emissions components at a compressor station as required in condition 66.

65. Recordkeeping Requirements

Records required by this Section must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this Section that are submitted electronically via the EPA's CDX may be maintained in electronic format. For each collection of fugitive emissions components at a compressor station, the Permittee must maintain the records identified in 66.a through c, as stated below. [40 CFR 60.5420a(c)]

- a. The fugitive emissions monitoring plan as required in condition 59.
- b. The records of each monitoring survey as specified below:
 - i. Date of the survey.
 - ii. Beginning and end time of the survey.
 - iii. Name of operator(s) performing survey. You must note the training and experience of the operator.
 - iv. Monitoring instrument used.

- v. When optical gas imaging is used to perform the survey, one or more digital photographs or videos, captured from the optical gas imaging instrument used for conduct of monitoring, of each required monitoring survey being performed. The digital photograph must include the date the photograph was taken and the latitude and longitude of the collection of fugitive emissions components at a well site or collection of fugitive emissions components at a compressor station imbedded within or stored with the digital file. As an alternative to imbedded latitude and longitude within the digital file, the digital photograph or video may consist of an image of the monitoring survey being performed with a separately operating GPS device within the same digital picture or video, provided the latitude and longitude output of the GPS unit can be clearly read in the digital image.
- vi. Fugitive emissions component identification when Method 21 is used to perform the monitoring survey.
- vii. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.
- viii. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
- ix. Documentation of each fugitive emission, including the following information:
 - (a) Location.
 - (b) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
 - (c) Number and type of components for which fugitive emissions were detected.
 - (d) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.
 - (e) Instrument reading of each fugitive emissions component that requires repair when Method 21 is used for monitoring.
 - (f) Number and type of fugitive emissions components that were not repaired as required in condition 62.
 - (g) Number and type of components that were tagged as a result of not being repaired during the monitoring survey when the fugitive emissions were initially found as required in condition 62.b.ii.
 - (h) If a fugitive emissions component is not tagged, a digital photograph or video of each fugitive emissions component that could not be repaired during the monitoring survey when the fugitive emissions were initially found as required in condition 62.b.ii. The digital photograph or video must clearly identify the location of the component that must be repaired. Any digital photograph or video required under this paragraph can also be used to meet the requirements under condition 65.b.v, as long as the photograph or video is taken with the optical gas imaging instrument, includes the date and the latitude and longitude are either imbedded or visible in the picture.
 - (i) Repair methods applied in each attempt to repair the fugitive emissions components.
 - (j) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.
 - (k) The date of successful repair of the fugitive emissions component.

- (l) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.
- c. For the collection of fugitive emissions components at a compressor station, if a monitoring survey is waived under condition 61.d, the Permittee must maintain records of the average calendar month temperature, including the source of the information, for each calendar month of the quarterly monitoring period for which the monitoring survey was waived.

66. *Reporting Requirements*

The Permittee must submit annual reports containing the information specified in condition 66.a through e, as stated below. The Permittee must submit annual reports following the procedure specified in condition 67. The initial report is due no later than 90 days after the end of the initial compliance period as provided in condition 63. Subsequent annual reports are due no later than the same date each year as the initial annual report. Multiple collections of fugitive emissions components at the compressor station may be included in a single report. [40 CFR 60.5397a(j) & 40 CFR 60.5420a(b)]

- a. The company name, facility site name associated with the affected facility and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.
- b. An identification of each affected facility being included in the annual report.
- c. Beginning and ending dates of the reporting period.
- d. A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- e. For the collection of fugitive emissions components at the compressor station within the company-defined area, the records of each monitoring survey including the information specified below. If a monitoring survey is waived under condition 61.d, you must include in your annual report the fact that a monitoring survey was waived and the calendar months that make up the quarterly monitoring period for which the monitoring survey was waived. [40 CFR 60.5420a(b)(7)]
 - i. Date of the survey.
 - ii. Beginning and end time of the survey.
 - iii. Name of operator(s) performing survey. If the survey is performed by optical gas imaging, you must note the training and experience of the operator.
 - iv. Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.
 - v. Monitoring instrument used.
 - vi. Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.
 - vii. Number and type of components for which fugitive emissions were detected.
 - viii. Number and type of fugitive emissions components that were not repaired as required in condition 62.

- ix. Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.
 - x. The date of successful repair of the fugitive emissions component.
 - xi. Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.
 - xii. Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.
67. The Permittee must submit annual reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>.) The Permittee must use the appropriate electronic report in CEDRI for this Section or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (<https://www3.epa.gov/ttn/chief/cedri/>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee must submit the report to the Administrator at the appropriate address listed in §60.4. Once the form has been available in CEDRI for at least 90 calendar days, the Permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. The Permittee may arrange with the Administrator a common schedule on which reports required by this Section may be submitted as long as the schedule does not extend the reporting period.

[40 CFR 60.5420a(b)(11)]

SECTION 6 – FUGITIVE DUST REQUIREMENTS

In accordance with condition 75.e, this Section contains standards including reasonable precautions that apply to sources of fugitive dust or particulate matter, which due to a lack of an identifiable emission point or plume are classified as nonpoint sources.

Emission Limitations and Standards

[PCC 17.13.020.A.2]

68. *Motor Vehicle Operations*

[PCC 17.16.070]

The Permittee shall not cause, suffer, allow, or permit a vacant lot, or an urban or suburban open area, to be driven over or used by motor vehicles, trucks, cars, cycles, bikes, or buggies, or by animals such as horses, without taking reasonable precautions to limit excessive amounts of particulates from becoming airborne. Dust shall be kept to a minimum by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means.

69. *Vacant Lots and Open Spaces*

[PCC 17.16.080]

- a. The Permittee shall not use or leave a vacant lot, housing plot, building site, parking area, sales lot, playground, livestock feedlot, or other open area - other than those used solely for soil-cultivation or vegetative crop-producing and harvesting agricultural purposes in such a state, after construction, alteration, clearing, leveling, or excavation that naturally induced wind blowing over the area causes a violation of conditions 17 or 18 of the permit. Dust emissions must be permanently suppressed by landscaping, covering with gravel or vegetation, paving, or applying equivalently effective controls.
- b. The Permittee shall not allow a vacant lot, parking area, sales lot, or other open urban area to be used by motor vehicles in such a manner that visible dust emissions induced by vehicular traffic on the area cause a violation of conditions 17 or 18 of this permit.

70. *Roads and Streets*

[PCC 17.16.090]

- a. The Permittee shall not cause, suffer, allow or permit the use, repair, construction or reconstruction of a roadway or alley without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Dust and other particulates shall be kept to a minimum by employing temporary paving, dust suppressants, wetting down, detouring or by other reasonable means.
- b. The Permittee shall not construct a new unpaved service road or unpaved haul road unless dust will be suppressed after construction by intermittently watering, limiting access, or applying chemical dust suppressants to the road, in such a way that visible dust emissions caused by vehicular traffic on the road do not violate conditions 17 or 18 of this permit.
- c. The Permittee shall not cause, suffer, allow or permit transportation of materials likely to give rise to airborne dust without taking reasonable precautions, such as wetting, applying dust suppressants, or covering the load, to prevent particulate matter from becoming airborne. Earth or other material that is deposited by trucking or earth moving equipment shall be removed from paved streets by the person responsible for such deposits.
- d. The surfacing of roadways with asbestos tailings is prohibited.

71. *Particulate Materials*

[PCC 17.16.100]

- a. The Permittee shall not cause, suffer, allow or permit crushing, screening, handling, transporting or conveying of materials or other operations likely to result in significant amounts of airborne dust without taking reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods to prevent excessive amounts of particulate matter from becoming airborne.
- b. Dust emissions from the transportation of materials shall be effectively controlled by covering stock loads in open-bodied trucks, limiting vehicular speeds, or other equivalently effective controls.

72. *Storage Piles*

[PCC 17.16.110]

- a. The Permittee shall not cause, suffer, allow, or permit organic or inorganic dust producing material to be stacked, piled or otherwise stored without taking reasonable precautions such as chemical stabilization, wetting, or covering to prevent excessive amounts of particulate matter from becoming airborne.
- b. Stacking and reclaiming machinery utilized at storage piles shall be operated at all times with a minimum fall of material and in such manner, or with the use of spray bars and wetting agents, as to minimize and control to ensure compliance with conditions 17 and 18 of this permit.

73. *Off-road, Roadway, and Site Cleaning Machinery*

[PCC 17.16.450 & 470]

- a. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any off-road, roadway, and site cleaning machinery smoke or dust for any period greater than 10 consecutive seconds, the opacity of which exceeds forty percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first 10 minutes.
- b. In addition to complying with condition 73.a above, the Permittee shall not cause, allow or permit the cleaning of any site, roadway, or alley without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions may include applying dust suppressants. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking, earthmoving equipment, erosion by water, or by other means.

Compliance Determination

[PCC 17.13.020.A.3, 4 & 5]

74. *Fugitive Dust Controls*

- a. The Permittee shall maintain a fugitive dust activity log and record the following:
 - i. Dates on which controls or reasonable precautions are taken to comply with the standards in conditions 68 through 73 and the type of control measures that were employed.
 - ii. In accordance with condition 21, the Permittee shall document any investigation or corrective action taken to comply with the standards and reasonable precautions in this Section.
- b. The Permittee shall maintain records of any discussions with PDEQ regarding the need for additional reasonably necessary and feasible precautions for dust control, and a list summarizing any agreed upon additional dust control requirements.

SECTION 7 – SPECIFIC APPLICABILITY PROVISIONS75. *Permitted Facility Sources*

The Specific Conditions in this permit apply to the following source categories, activities and operations:

a. *Section 2 – Facility-Wide Operations*

This Section applies to facility-wide operations and to all sources of air contaminants at the facility unless exempted under condition 77. The provisions in this section include the following: Operating limitations, general control standards, materials handling standards, odor limiting standard, opacity standard, visibility limiting standard, disposition of portable sources, and requirements to obtain applicable activity permits. In addition to the General Conditions this section also contains specific monitoring, recordkeeping, reporting, facility change, and testing requirements that apply facility-wide and to all emission sources and operations covered by this permit.

[PCC 17.14.040-480, PCC 17.16.010., PCC 17.16.020 thru 050, PCC 17.16.230.B, PCC 17.16.400.A & C.1 thru 4, & PCC 17.16.430.F]

[Federally and Locally Enforceable Conditions]

b. *Section 3 – NSPS Subpart KKKK for New Stationary Combustion Turbines*

This Section applies to owners and operators of stationary combustion turbine(s) with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Stationary combustion turbines regulated under this Section are exempt from the requirements of 40 CFR Part 60, Subpart GG.

[40 CFR 60.4305]

c. *Section 4 – Stationary Combustion Engine(s)*

This Section applies to new or reconstructed reciprocating internal combustion engines (RICE) located at an area source.

[40 CFR 60.4200, 40 CFR 60.4230, & 40 CFR 63.6590(c)(1)]

i. *NESHAP for RICE – 40 CFR Part 63 – Subpart ZZZZ*

Applicable to SI RICE identified in the equipment list (Attachment 3) subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

[40 CFR 63.6585]

[Federally Enforceable Conditions]

Applicability

A stationary RICE located at an area source of HAP emissions is “new” if construction was commenced on or after June 12, 2006. A stationary RICE is “reconstructed” if reconstruction as defined in 40 CFR 63.2 commenced on or after June 12, 2006:

[40 CFR 63.6590(a)(iii)]

- (a) For each new or reconstructed stationary SI or CI RICE, the Permittee must meet the requirements by meeting the requirements of 40 CFR Part 60, Subpart IIII, for compression ignition engines or 40 CFR 60, Subpart JJJJ for spark ignition engines. No further requirements apply for such engines.

[40 CFR 63.6590(c)]

ii. *NSPS for SI ICE – 40 CFR Part 60 – Subpart JJJJ*

Applicable to SI ICE identified in the equipment list (Attachment 3) subject to 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

[40 CFR 60.4230]

[Federally Enforceable Conditions]

Applicability

Applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a) through (f) of this section. For the purposes of this subsection, the date that construction commences is the date the engine is ordered by the owner or operator.

- (a) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.
- (b) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:
 - (i) On or after July 1, 2008; or
 - (ii) On or after January 1, 2009, for emergency engines.
- (c) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:
 - (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
 - (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
 - (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
 - (iv) On or after January 1, 2009, for emergency engines.
- (d) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
 - (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);
 - (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;
 - (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or
 - (iv) On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).
- (e) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.
- (f) The installation restrictions in condition 40 of this permit are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

- d. *Section 5 – Requirements for Crude Oil & Natural Gas Facilities (spec. – “the collection of fugitive emissions components at a compressor station”).*

This Section applies to the collection of fugitive emission components at the affected compressor station. [40 CFR 63.5365a]

[Federally Enforceable Conditions]

Applicability

Applicable to the owner or operator of one or more of the onshore affected facilities listed in 40 CFR 60.5365a, as listed below for which construction, modification, or reconstruction occurs after September 18, 2015.

- (a) The collection of fugitive emissions components at a compressor station, as defined in §60.5430a, is an affected facility. For purposes of §60.5397a, a “modification” to a compressor station occurs when: (1) An additional compressor is installed at a compressor station; or (2) One or more compressors at a compressor station is replaced by one or more compressors of greater total horsepower than the compressor(s) being replaced. When one or more compressors is replaced by one or more compressors of an equal or smaller total horsepower than the compressor(s) being replaced, installation of the replacement compressor(s) does not trigger a modification of the compressor station for purposes of §60.5397a. [40 CFR 60.5365a(j)]

- e. *Section 6 – Fugitive Dust Requirements*

This Section contains standards including reasonable precautions that apply to sources of fugitive dust at the facility or particulate matter which due to a lack of an identifiable emission point or plume are classified as nonpoint sources. These sources include but are not limited to motor vehicle operations on vacant lots and open areas, vacant lots and open areas susceptible to wind erosion; roads and streets; particulate material handling operations; dust producing material storage piles; and off-road, roadway and site cleaning machinery.

[PCC 17.16.055, PCC 17.16.070, PCC 17.16.080, PCC 17.16.090, PCC 17.16.100, PCC 17.16.110, PCC 17.16.470]

[Locally Enforceable Conditions]

76. *Local (New and Existing) Stationary Source Performance Standards*

Local performance standards apply to the following equipment or operations at the facility: stationary rotating machinery; petroleum liquid storage tanks at least 250 gallons and less than 40,000 gallons, any tank or container used to transport or store VOCs; organic solvents and other organic materials, and any unclassified source.

[PCC 17.13.020.A.2, PCC 17.16.230.B, PCC 17.16.340, PCC 17.16.400.A & C.1 thru 4, & PCC 17.16.430]

[Locally Enforceable Conditions]

77. *Exempt Sources*

- a. *Agricultural Equipment:* The Specific Conditions contained in this air quality permit shall not apply to agricultural equipment used in normal farm operations, unless their operation without a permit would result in a violation of the Act. [PCC 17.11.090.C.3]
[Locally Enforceable Condition]
- b. *Motor Vehicles:* The Specific Conditions contained in this air quality permit shall not apply to motor vehicles. *Motor Vehicles* means any self-propelled vehicle designed for transporting persons or property on public highways.
- c. *Mobile Sources:* Except as provided in PCC 17.16.450-470, which applies to off-road machinery, and roadway and site cleaning machinery, the Specific Conditions contained in this air quality permit shall not apply to mobile sources. *Off-Road machinery* includes trucks, graders, and other construction or mining machinery not normally driven on a completed highway.

ATTACHMENT 1 – APPLICABLE REGULATIONS

40 CFR, Part 60 Standards of Performance for New Stationary Sources (NSPS)

Subpart A	General Provisions
Subpart KKKK	NSPS for Stationary Combustion Turbines
Subpart JJJJ	NSPS for Stationary Spark Ignition Internal Combustion Engines
Subpart OOOOa	NSPS for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015.
Appendix A	Test Methods

40 CFR, Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP)

Subpart A	General Provisions
Subpart ZZZZ	NESHAP for Stationary Reciprocating Internal Combustion Engines

Pima County Code Title 17, Chapter 17.11 – General Provisions for Permits

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 Source Permits

- 17.11.060 Permit Display or Posting
- 17.11.120 Material permit condition
- 17.11.160 Test methods and procedures
- 17.11.210 Performance tests

Pima County Code Title 17, Chapter 17.13 – Individual and General Permits and Permit Revisions for Class II and Class III Permits

Article I – General Provisions

- 17.13.010 Application processing procedures for Class II and Class III permits
- 17.13.020 Permit contents for Class II and Class III permits

Article II – Permit Revisions, Renewals and Transfers for Class II and Class III Permits

- 17.13.100 Facility changes that require a permit revision for Class II and Class III permits
- 17.13.110 Procedures for certain changes that do not require a permit revision for Class II or Class III permits
- 17.13.130 Minor revisions for Class II or Class III permits
- 17.13.140 Significant revisions for Class II or Class III permits
- 17.13.150 Reopening, revocation, or termination for Class II or Class III permits

Article III – Emissions for Class II and Class III Sources

- 17.13.180 Annual Emissions Inventory Questionnaire for Class II or Class III permits
- 17.13.190 Excess Emissions reporting requirements for Class II or Class III permits

Article V – Fees for Class II, Class III, and General Permits

- 17.13.240 Fees related to Class II and Class III permits

Pima County Code Title 17, Chapter 17.14 – Activity Permits

- 17.14.040 Fugitive Dust Activity permits
- 17.14.060 Asbestos NESHAP activity permits
- 17.14.080 Open burning permits

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

Article I – General Provisions

- 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

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

- 17.16.055 General
- 17.16.070 Fugitive dust emissions standards for motor vehicle operation
- 17.16.080 Vacant lots and open spaces
- 17.16.090 Roads and streets
- 17.16.100 Particulate materials
- 17.16.110 Storage piles
- 17.16.450 Off-road machinery
- 17.16.470 Roadway and site cleaning machinery

Article IV – New and Existing Stationary Source Performance Standards

- 17.16.130 Applicability
- 17.16.230.D Standards of performance for storage vessels for petroleum liquids
- 17.16.340 Standards of performance for stationary rotating machinery
- 17.16.400.A Organic solvents and other organic materials
- 17.16.430.F Standards of performance for unclassified sources

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

- 17.20.010 Source sampling, monitoring and testing
- 17.20.040 Concealment of emissions

Pima County Code Title 17, Chapter 17.24 – Emission Source Recordkeeping and Reporting

- 17.24.020 Recordkeeping for compliance determination

ATTACHMENT 2 – EMISSIONS DISCHARGE OPACITY LIMITING STANDARDS**PCC 17.16.040**

Type of Source	Instantaneous Opacity Measurements			Maximum Allowable Average Opacity, %
	Required No. (For a Set)	Excluded No. (Highest Values)	No. to Use For Averaging	
Cold Diesel Engines ¹	25	0	25	60
Loaded Diesel Engines ²	26	1	25	60
Other Sources ³	25	0	25	20

¹ Applicable to the first 10 consecutive minutes after starting up a diesel engine.

² Applicable to a diesel engine being accelerated under load.

³ Any source not otherwise specifically covered within this table, unless otherwise specifically covered in this permit.

ATTACHMENT 3 – EQUIPMENT LIST**NSPS Subpart KKKK Stationary Combustion Turbines (Section 3)**

Type of Equipment	Equipment ID	Primary Fuel	Manufacturer	Model	Maximum Rated Capacity	Date of Manufacture
Turbine	TURBINE01	Natural Gas	Solar	MARS 100-16000S	15,900 hp	After February 18, 2005

NSPS Subpart JJJJ Spark Ignition Internal Combustion Engines (Section 4)

Type of Equipment	Equipment ID	Primary Fuel	Manufacturer	Model	Maximum Rated Capacity	Model year/ Applicability Date	Voluntary Operating Hours Limit ¹ (hrs/yr)
Emergency Generator	FUG01	Natural Gas	Caterpillar	G3512	1114 hp	After June 12, 2006	100

¹ The operating hours are limited to maintenance testing and readiness checks. There is no limit on hours of operation during true emergencies.

ATTACHMENT 4 - INSIGNIFICANT ACTIVITIES

For the purpose of this permit, the following equipment or operations have been determined by the control officer, because of their size or production rate, to be de minimus emission sources and/or insignificant or trivial activities in accordance with PCC 17.04.340.A.(114).

Description	Maximum Rated Capacity	Fuels Used
Landscaping, building maintenance, or janitorial services.	-	-
Gasoline storage tanks with a throughput less than 1000 gallons/month; provided such tanks are not otherwise affected gasoline dispensing facilities subject to NESHAP - Subpart CCCCCC, and are equipped with a submerged filling device, or acceptable equivalent, for the control of hydrocarbon emissions in accordance with PCC 17.16.230.B.	≤ 10,000 gallons	Gasoline
Diesel or Fuel Oil Storage Tanks including tanks storing low vapor pressure liquids such as virgin oil, flush oil, anti-freeze, et. al.	≤ 40,000 gallons	
Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass or wood.	-	-
Powder Coating Operations	-	-
Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets, and IC engine-driven water pumps used only for emergency replacement or standby service. <i>Note: Portable or temporary IC engines or other non-road engines that operate, or are planned for operation, at a fixed location for more than 12 months are subject to stationary source permitting requirements. Portable or temporary IC located at a facility, may be required to keep records showing when the sources are transferred to or from the facility, or moved to alternate locations at the facility in order to establish that the sources are not stationary IC engines.</i>	-	-
Lab equipment used exclusively for chemical and physical analyses.	-	-
Short term maintenance activities including but not limited to steam cleaning	-	-
Operation of oil/water/scrubber liquid systems	-	-
Operation of cooling water, plant water, wastewater, and other water systems	-	-
Emissions from testing and sampling.	-	-
Emissions from Natural Gas blowdowns and pigging operations.	-	-
Operation of battery systems.	-	-
Operation of stationary natural gas fired appliances rated less than 1.0 MMBtu/hr provided the combined capacity of such equipment does not exceed 10.0 MMBtu.	-	-
Operation of natural gas vents, and gas-driven pneumatic valves and controllers not otherwise considered a source of fugitive emissions in accordance 40 CFR 60.5430a, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission.	-	-
Trivial activities as provided in PCC 17.04.340.A.237 a through xx.	-	-