

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR PROGRAM

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

AIR QUALITY PERMIT

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

**PIMA COUNTY FACILITIES MANAGEMENT
DEPARTMENT
DOWNTOWN COMPLEX
TUCSON, AZ 85701**

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

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

PERMIT NUMBER **649**

PERMIT CLASS **II**

ISSUED: **October 27, 2016**

EXPIRES: **October 26, 2021**



SIGNATURE

Rupesh Patel, Air Permit Manager, PDEO

TITLE

TABLE OF CONTENTS

<i>Permit Summary</i>	3
<i>Specific Conditions</i>	4
 <i>Section 1 – General Applicability</i>	
Statutory Authority	4
Permitted Facility Sources	4
Permit Sections	4
Applicability of More Than One Standard	4
 <i>Section 2 – Facility -Wide Operations</i>	
Emission Limitations and Standards	5
Monitoring Requirements	7
Recordkeeping Requirements	7
Reporting Requirements	8
Facility Changes	8
Testing Requirements	9
 <i>Section 3 – Fossil Fuel Fired Industrial and Commercial Equipment (Boilers and Heaters)</i>	
Emission Limitations and Standards	10
Compliance Determination	10
 <i>Section 4 – Stationary Rotating Machinery</i>	
Emission Limitations and Standards	11
Compliance Determination	11
 <i>Section 5 – NSPS For Stationary Spark Ignition Internal Combustion Engines</i>	
Emission Limitations and Standards	12
Compliance Determination	14
 <i>Section 6 – NSPS for Compression Ignition Internal Combustion Engines</i>	
Emission Limitations and Standards	18
Compliance Determination	20
 <i>Section 7 – Specific Applicability Provisions</i>	
Permitted Facility Sources	23
Local (New and Existing) Stationary Source Performance Standards	25
Exempt Sources	25
<i>General Conditions</i>	26
<i>Attachment 1: Applicable Regulations</i>	27
<i>Attachment 2: Equipment List</i>	29
<i>Attachment 3: List of Insignificant Activities</i>	32
<i>Attachment 4: Emissions Discharge Opacity Limiting Standards</i>	33

PERMIT SUMMARY***Location Information***

This air permit is issued to the existing Pima County government complex operated by the Pima County Facilities Management Department, the Permittee, located at 110-150 W. Congress St; 190 W. Pennington Street; 32, 33, & 45 N. Stone Avenue; and 115 N. Church Avenue, Tucson, AZ. The Pima County Facilities Management Department's administrative offices are located at 150 W. Congress Street. The Pima County government complex is located on parcels identified by Pima County Assessor's Parcel #'s: 117-11-001C, 117-11-064C, 117-12-032B, 117-12-0100, 117-20-012A, and 117-20-0110.

Source Description

All pollutant-emitting activities and operations at the source fall under the following SIC Code:

- 9199 General Government, NEC (NAICS 921190)

The complex contains and operates fossil-fuel fired industrial and commercial equipment, & emergency generators.

Air Permit Information

This is the first renewal of the existing 5 year air quality permit. This permit incorporates operating limitations to avoid federally applicable regulations.

The following table summarizes the potential to emit of the source with limitations. These emission values are taken from the information contained in the renewal application and from standard emission factors in AP-42 Sections 1.4, 3.3, and 3.4. The emission values are for information purposes only and are not intended to be enforceable limits.

Controlled Facility-Wide Potential Emissions of Pollutants ¹ (tons/yr)										
Conventional or Criteria Air Pollutant								NSPS	HAPs	
PM_{2.5}	PM₁₀	PM	NO_x	VOC	CO	SO₂	Lead	N/A	Total	Single
0.59	0.60	0.63	10.35	0.53	8.20	0.18	Negligible	-	0.17	< 0.17

¹ Emergency generator engine PTE is calculated on operation as an emergency generator (100 hour/year). Boiler PTE is calculated on unlimited operation when firing natural gas.

SPECIFIC CONDITIONS

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

SECTION 1: GENERAL APPLICABILITY

1. *Statutory Authority*

Emissions from this facility, specifically the emissions from the equipment described in Attachment 2 of this permit fall under primary SIC Code 9199 and are subject to enforceable limitations as provided in the Specific Conditions contained in this permit. This air permit is issued pursuant to (ARS) §49-480 and constitutes an “Installation Permit” for the purpose of the applicable State Implementation Plan and authorizes the construction and/or operation of the equipment enumerated in the “Equipment List” in Attachment 2. 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 this facility, specifically the emissions from equipment and operations more fully described in the application for permit, will neither cause nor contribute to a violation of any ambient air quality standard, even without additional limitations, and a further finding that, in view of the permit issued, the allowable emissions do not constitute a "major source" within the meaning of PCC 17.04.340.A.128. Notwithstanding the above findings, the issuance of this air quality permit shall not relieve the Permittee from compliance with all local, county, state and federal laws, statutes, and codes.

[PCC 17.12.010.B & D, PCC 17.12.140.A, PCC 17.12.165 and ARS §49-480]

2. *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), based on the emission limitations contained in this permit, and when considering emissions from sources aggregated under the same SIC Code.

3. *Permitted Facility Sources*

The Specific Conditions contained in this permit apply to the equipment listed in Attachment 2 of this permit and the following source categories. Refer to Section 6 of this permit for conditions relating the specific applicability to facility sources.

- a. Boilers, heaters, and other fuel fired equipment
- b. Stationary Rotating Machinery

4. *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 – Fossil Fuel Fired Industrial Commercial Equipment
- Section 4 – Stationary Rotating Machinery
- Section 5 – NSPS for Emergency Stationary SI ICE
- Section 6 – NSPS for Emergency Stationary CI ICE
- Section 7 – Specific Applicability

5. *Applicability of more than one standard*

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.

[PCC 17.16.010.B]

[Locally Enforceable Condition]

SECTION 2: FACILITY-WIDE OPERATIONS

In accordance with condition 56.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 17.12.185.A.2]

6. *Operating Limitations*

[PCC 17.12.350.A.3.a]

The Permittee shall comply with the operating limitations in Sections 3 through 6 of this permit.

[Material Permit Conditions]

7. *General Control Standards*

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. [PCC 17.12.020 & PCC 17.16.020.A]

b. The Permittee is prohibited from firing high sulfur oil in any stationary or portable source without submitting a revision, as provided in 21 of this Section, demonstrating to the satisfaction of the Control Officer, both that sufficient quantities of low sulfur oil are not available for use by the Permittee, and that the Permittee has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards will not be violated. For purposes of this paragraph “high sulfur oil” means oil containing 0.90 percent or more by weight of sulfur. 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 or portable sources. [PCC 17.12.185.A.2]

[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 owner or operator thereof to a degree that will adequately reduce or eliminate the discharge of air pollution to adjoining property. [PCC 17.16.020.B]

8. *General Materials Handling Standards*

a. 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]

b. 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]

c. All pumps and compressors which handle VOC shall be equipped with mechanical seals or other equipment of equal efficiency to prevent the release of organic contaminants into the atmosphere. [PCC 17.16.230.D]

9. *Odor Limiting Standard*

The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under the Permittee's 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 8.a.

[PCC 17.16.430.F & PCC 17.16.030]

10. *Opacity Limit*

[PCC 17.16.040, PCC 17.16.050.B, & PCC 17.16.130.B.1]

Except as otherwise specified in the Specific Conditions of this permit and the Table in Attachment 4, the opacity of all plumes and effluents from all point, non-point, or fugitive emission sources shall not exceed 20% as determined by EPA Reference Method 9, Appendix A, 40 CFR Part 60.

[Federally Enforceable When Opacity Is Above 40%]

- a. Opacities (optical densities), as measured in accordance with Method 9, of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument. [PCC 17.16.040.A.1]
- b. 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 4. 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]
- c. 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]
- d. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements as specified in conditions 10 and 11, conditions 10 and 11 shall not apply. [PCC 17.16.040.B]

11. *Visibility Limiting Standard*

[PCC 17.16.050]

- 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.
- 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.
 - i. Condition 11.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 11.b shall not apply to the generation of airborne particulate matter from undisturbed land.

12. *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 17.12.475 & 40 CFR 61, Subpart M]

Monitoring Requirements

[PCC 17.12.185.A.3]

13. *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 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 10 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. [PCC 17.16.040 & PCC 17.16.50.B]

14. *Additional Monitoring*

Except as provided in conditions 13 and 23 in this Section or as otherwise required by the Specific Conditions in this permit, additional monitoring for compliance with the facility-wide standards in conditions 6 through 12 shall not be necessary. The Control Officer may ask the Permittee to conduct additional monitoring if the Control Officer has reasonable cause to believe there has been a violation of the facility-wide standards.

Recordkeeping Requirements

[PCC 17.12.185.A.4]

15. *Monitoring Records*

[PCC 17.12.184.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.

16. *Record Retention*

[PCC 17.12.185.4.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.

17. *Recordkeeping for Compliance Determination*

[A.R.S.§49-485, PCC 17.12.080, & 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 17.12.185.A.5]

18. *Excess Emissions Reporting:*

[PCC 17.12.040]

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

19. *Emissions Inventory Reporting*

[PCC 17.12.320]

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 17.12.320.

20. *Certification of Truth Accuracy and Completeness*

[PCC 17.12.165.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 17.12.235, PCC 17.12.240.C.3, PCC 17.12.255 & PCC 17.12.260]

21. *Permit Revision Application*

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, if applicable, apply for the appropriate revision in accordance with PCC 17.12.235, PCC 17.12.255, or PCC 17.12.260.

22. *Notification*

[PCC 17.12.240.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 17.12.240.C

23. *Facility Change Log*

[PCC17.12.240.B]

The Permittee shall maintain a log of other facility changes that do not require revision or notice in accordance with PCC 17.12.240.B.

Testing Requirements

[PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

24. Except where otherwise specified in the Specific Conditions in this permit, the following provisions and test methods shall be used. The methods and standards below are from Appendix A of 40 CFR Part 60 or incorporated by reference in 40 CFR §60.17.

a. *Opacity*

When required, EPA Test Method 9 shall be used to monitor compliance with the opacity standards identified in this permit.

[PCC 17.12.045.B]

b. *Fuel Sulfur Limitations*

Documentation, such as 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 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*

Except as provided in this Section, 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 owner or operator has violated or is in violation of any standard or applicable emission limit in this permit.

SECTION 3: FOSSIL FUEL FIRED INDUSTRIAL AND COMMERCIAL EQUIPMENT

In accordance with condition 56.b, the provisions in this Section are applicable to boilers, heaters, and other fuel fired equipment identified on the equipment list in Table 1 of Attachment 2. In addition to the following provisions, the general provisions of 40 CFR Part 60 and 63, Subpart A apply to affected steam generating units (boilers) as applicable. All provisions of this section are locally enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.12.185.A.2]

25. Operating Limitations

The Permittee shall burn only the following fuels in each boiler, heater, or other fuel fired equipment listed in Table 1 of Attachment 2, subject to the following limitations:

[PCC 17.12.350.A.3.a]

[Material Permit Condition]

a. Natural Gas

There are no operating hours or fuel limitations for equipment when burning natural gas. For the purpose of this provision, *Natural gas* means: A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835; or a mixture of hydrocarbons that maintains a gaseous state at ISO conditions (*i.e.*, a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals), additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (950 and 1,150 Btu per dry standard cubic foot); or propane or propane-derived synthetic natural gas. *Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8 .

[40 CFR 63.11237]

26. Opacity Limit

The opacity of all plumes and effluents from equipment listed in Table 1 of Attachment 2 shall not exceed 20% as determined by EPA Reference Method 9, Appendix A, 40 CFR Part 60.

[PCC 17.16.040, PCC 17.16.130.B]

Compliance Determination

[PCC 17.12.185.A.3, 4 & 5]

27. Operating Limitations

When using natural gas fuel, the Permittee may demonstrate that only commercially available pipeline quality natural gas fuel was fired by making available to the Control Officer for inspection, documentation, such as invoices or statements from the fuel supplier, showing that commercial natural gas was purchased for use in the equipment. Alternatively, the demonstration may be made by actual inspection of the equipment showing that pipeline natural gas is plumbed to the equipment for firing.

28. Opacity Limit

A demonstration to show compliance with the emission limitation for opacity shall not be required since the percent of opacity of visible emissions from the boilers while combusting natural gas fuel is inherently low. The Permittee shall operate and maintain the boilers at all times - including periods of startup, shutdown, and malfunction - in a manner consistent with good air pollution control practices and consistent with manufacturer's guidelines.

SECTION 4: STATIONARY ROTATING MACHINERY

In accordance with condition 56.c, the provisions in this Section apply to the stationary rotating machinery listed in Table 2 of Attachment 2. All provisions of this Section are locally enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.12.185.A.2]

29. *Operating Limitations*

[PCC 17.12.350.A.3.a]

- a. The Permittee shall not operate emergency stationary rotating machinery for more than the number of hours per year allowed in Table 2 of Attachment 2 in any 12-consecutive month period. There is no limit on hours of operation during true emergencies. **[Material Permit Condition]**
- b. The Permittee shall burn only the specified fuel(s) allowed for each unit in Table 2 of Attachment 2. The Permittee shall only fire fuel with Sulfur content less than 0.90% Sulfur by weight. [PCC 17.16.340.F] **[Material Permit Condition]**

30. *Opacity Limit*

Stationary Rotating Machinery shall not exceed the facility-wide opacity limit in condition 10. In addition, the Permittee shall not cause or permit to be emitted into the atmosphere from any rotating stationary rotating machinery (generators) 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 17.16.130.B & PCC 17.16.340.E]

Compliance Determination

[PCC 17.12.185.A.3, 4, & 5]

31. *Operating Limitations*

- a. For each generator identified as having an hour limitation in Table 2 of Attachment 2, the Permittee shall record the monthly operating hours and recalculate a rolling twelve (12) month total within 30 calendar days of the end of the month.
- b. In order to demonstrate compliance with the fuel limitation in condition 29.b, the Permittee shall maintain records of fuel supplier specifications which verify the sulfur content of the fuels, piped and/or as delivered.

32. *Opacity Limit*

The Permittee shall conduct a visible emissions check on the exhaust stack of stationary rotating machinery at least monthly if run during the month. For the purposes of this condition, a visible emission check is verification that abnormal emissions are not present at the generator stack. The Permittee shall record the date and time of the check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required). No monthly visible emissions checks are required for stationary rotating machinery that only fire natural gas or LPG.

SECTION 5: NEW SOURCE PERFORMANCE STANDARDS (NSPS) FOR STATIONARY SPARK IGNITION INTERNAL COMBUSTION ENGINES (SI ICE)

In accordance with condition 56.d, the provisions in this Section apply to affected stationary emergency ‘SI ICE’ listed in Table 3 of Attachment 2. The general provisions of 40 CFR Part 60, §§ 60.1 through 60.19 apply to applicable ‘SI ICE’ sources as indicated in Table 3 to 40 CFR Part 60, Subpart JJJJ. All provisions in this Section are federally enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.12.185.A.2]

33. *Operating Limitations*

- a. The Permittee shall not operate the emergency SI ICE for more than the number of hours per year specified in the permit equipment list on a rolling twelve (12) month total basis. [PCC 17.12.350.A.3.a]
[Material Permit Condition]
- b. The Permittee must comply with the emission standards in Table 1 of Subpart JJJJ (as shown below) for their stationary emergency SI ICE. [40 CFR 60.4233(d), 40 CFR 60.4233(e), & 40 CFR 4233(f)(4)]

Emission Standards for Emergency SI ICE (ref. Table 1 to 40CFR,Part 60, Subpart JJJJ)

Engine Type	Maximum Engine Power	Emission Standards ^a		
		g/HP-hr or [ppmvd at 15% O ₂]		
		NO _x	CO	VOC ^b
Emergency (New and Modified)	25 < HP < 130	10 ^c	387	N/A
Emergency (New)	HP ≥ 130	2.0 [160]	4.0 [540]	1.0 [86]
Emergency (Modified)	HP ≥ 130	3.0 [250]	4.0 [540]	1.0 [86]

- ^a 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 percent O₂.
- ^b For purposes of 40 CFR 60, Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.
- ^c The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO_x+HC.

- c. The Permittee must operate and maintain emergency stationary SI ICE that achieve the emission standards as required in condition 33.b over the entire life of the engine. [40 CFR 60.4234]

34. *Opacity*

[Locally Enforceable Conditions]

- a. The Permittee shall not cause, allow, or permit the effluent from any stationary SI ICE to have an average opacity density equal to or greater than 20 percent. [PCC 17.16.040.A]
[This condition is Federally Enforceable when opacity is above 40%]
- b. The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than ten consecutive seconds that exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [PCC 17.16.340.E]

35. *Fuel Limitation*

The Permittee shall burn only the specified fuel allowed for the stationary SI ICE in Table 2, Attachment 2 of this permit. [PCC 17.12.185.A.2]

[Locally Enforceable and Material Permit Condition]

36. *Installation Restrictions*

[40 CFR 60.4236]

- a. The Permittee may not install stationary SI ICE that do not meet the applicable requirements in 40 CFR §60.4233 after the specified dates as follows: [40 CFR.4236(a)-(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 $500 \leq \text{HP} \leq 1350$, 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 §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 36.a, after the date specified in condition 36.a. [40 CFR 60.4236(d)]
- c. The requirements of condition 36 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)]

37. *Emergency Designation*

The Permittee must operate the emergency ICE according to the requirements in conditions 37.a through c. Any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in conditions 37.a through c is prohibited. If the Permittee does not operate the engine according to the requirements in conditions 37.a through c, the engine will not be considered an emergency engine 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 ICE in emergency situations. [40 CFR 60.4243(d)(1)]
- b. The Permittee may operate the subject emergency ICE as specified in condition 37.b.i for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as allowed in condition 37.c, counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR 60.4243(d)(2)]
 - i. The subject emergency 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 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 63.60.4243(d)(2)(ii)]~~

~~[Vacated by U.S. Court of Appeals for the District of Columbia in Delaware vs EPA, May 4, 2016]~~

~~iii. Emergency 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 60.4243(d)(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 ICE up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided for maintenance and testing and emergency demand response provided in condition 37.b. Except as provided in condition 37.c.i, 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 facility 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)]

i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[40 CFR 60.4243(d)(3)]

- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.

Compliance Determination

[PCC 17.12.185.A.3, 4 & 5]

38. The Permittee must demonstrate compliance with the emission standards specified in condition 37.b according to one of the methods in condition 38.a and 38.b:

[40 CFR 60.4243(b)]

a. Purchasing an engine certified according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year and demonstrating compliance according to condition 38.a.i or 38.a.ii as follows:

[40 CFR 60.4243(b)(1)]

i. For certified stationary SI ICE and control devices that are operated and maintained according to the manufacturer's emission-related written instructions:

(a) The Permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required.

[40 CFR 60.4243(a)(1)]

- ii For certified stationary SI ICE and control devices that are not operated and maintained according to the manufacturer's emission-related written instructions, the engine is considered a non-certified engine, and the Permittee must demonstrate compliance according to condition 38.a.ii.(a) through (c), as appropriate. [40 CFR 60.4243(a)(2)]

- (a) For stationary SI ICE < 100 HP;

The Permittee must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator. [40 CFR 60.4243(a)(2)(i)]

- (b) For stationary SI ICE, $100 \leq \text{HP} \leq 500$;

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 within 1 year of engine startup to demonstrate compliance. [40 CFR 60.4243(a)(2)(ii)]

- (c) For stationary SI ICE > 500 HP;

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 within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [40 CFR 60.4243(a)(2)(iii)]

- b. Purchasing a non-certified SI ICE engine and demonstrating compliance with the emission standards specified in condition 38.b and according to the requirements in condition 43 as applicable, and according to condition 38.b.i and 38.b.ii as follows: [40 CFR 60.4243(b)(2)]

- i. For stationary SI ICE, $25 < \text{HP} \leq 500$ HP;

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, you must conduct an initial performance test to demonstrate compliance. [40 CFR 60.4243(b)(2)(i)]

- ii. For stationary SI ICE > 500 HP;

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, you 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)]

- c. For stationary SI ICE \leq 500 HP;

If the Permittee purchases a non-certified engine, or the Permittee does not operate and maintain a certified stationary SI ICE and control device according to the manufacturer's written emission-related instructions, the Permittee is required to perform initial performance testing as indicated in condition 38. a and b, but the Permittee is not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). (See Technical Support Document accompanying this permit for the definition of a rebuilt stationary SI ICE).

[40 CFR 60.4243(f)]

- d. The Permittee may operate their stationary SI natural gas fired engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the Permittee is required to conduct a performance test to demonstrate compliance with the emission standards in condition 33.b. [40 CFR 60.4243(e) & 40 CFR 60.4233]
- e. It is expected that air-to-fuel ratio (AFR) controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times. [40 CFR 60.4243(g)]

39. *Hour Meter Installation*

- a. Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.
- b. Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.
- c. If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

40. *Opacity*

A demonstration to show compliance with the emission limitation for opacity in condition 34 shall not be required since the percent of opacity of visible emissions from the stationary SI ICE while combusting natural gas fuel is inherently low. The Permittee shall operate and maintain the stationary SI ICE at all times - including periods of startup, shutdown, and malfunction - in a manner consistent with good air pollution control practices and consistent with manufacturer's guidelines. [PCC 17.12.185.A.3]

41. *Fuel Limitation*

The Permittee shall be considered in compliance with the fuel limitation in condition 35 by demonstrating that only commercially available pipeline quality natural gas was fired in the stationary SI ICE listed. Such a demonstration may be made by making available to the Control Officer for his inspection, documentation, such as invoices or statements from the fuel supplier, showing that only commercial natural gas was purchased for use in the equipment. [PCC 17.12.185.A.3]

42. *Notifications, Reports and Records*

- a. 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. Records of conducted maintenance to demonstrate compliance.
 - iii. If the stationary SI internal combustion engine 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 and 1048.
 - iv. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to condition 38.a.ii, documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4) & 40 CFR 60.4243(a)(2)]
- b. The Permittee must keep the following run hour records:
 - i. For each subject SI ICE identified as having an operational limitation in the permit equipment list, the Permittee shall record the monthly operating hours and recalculate a rolling twelve (12) month total within 10 calendar days of the end of the month. [PCC 17.12.185.A.3 & 4]
[Locally Enforceable Condition]
 - ii. 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)]

43. *SI ICE Performance Testing*

The Permittee shall follow the provisions in condition 24 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)]

44. *Reporting for Performance Testing*

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 6: NSPS FOR STATIONARY COMPRESSION IGNITION ‘CI’
INTERNAL COMBUSTION ENGINES ‘ICE’**

In accordance with condition 56.e, the provisions in this Section apply to emergency CI ICE listed in Table 4 and 4a of Attachment 2. The General Provisions of 40 CFR Part 60, Subpart A apply to applicable CI ICE sources as indicated in Table 8 of 40 CFR Part 60, Subpart III. All provisions of this Section are Federally Enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.12.185.A.2]

45. Operating Limitations

a. Hour Limitation

The Permittee shall not operate the generator(s) for more than the number of hours per year specified in the permit equipment list on a rolling twelve (12) month total basis. [PCC 17.12.190.B]

[Material Permit Conditions]

b. Emissions Standards

[40 CFR 60.4203, 40 CFR 4205(b) & 40 CFR 60.4202(a)]

- i. New CI ICE subject to this Section must be certified by the manufacturer at or below the applicable emission standards and shall continue to meet them for the certified emissions life of the engine.
- ii. Modified or reconstructed CI ICE subject to this Section shall be certified by the entity that conducts the modification or reconstruction (via the appropriate testing according to 40 CFR 60.4212, if appropriate). This certification shall state that emissions will be at or below the applicable emission standards and the unit shall continue to meet them for the useful life of the engine.
- iii. The applicable emission standards and the certified emissions life of the engine(s) is identified in the equipment list in Table 3a of Attachment 2.
- iv. The Permittee must operate and maintain applicable units that achieve the emission standards as required in condition 45.b.iii according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60.4206]

46. Opacity

a. Except for constant-speed engines, opacity shall not exceed the following:

[40 CFR 60.4202(a)(1) & (a)(2), 40 CFR 89.113 & 40 CFR 1039.105]

- i. 20 percent during the acceleration mode;
- ii. 15 percent during the lugging mode; and
- iii. 50 percent during the peaks in either the acceleration or lugging modes.

b. CI ICE subject to this Section shall comply with the facility-wide opacity limit in condition 10. In addition, the Permittee shall not cause or permit to be emitted into the atmosphere from any rotating stationary rotating machinery (generators) 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 17.16.340.E]

[Locally Enforceable Condition]

47. *Fuel Requirements*

Beginning October 1, 2010, stationary CI ICE subject to this Section that use diesel fuel must purchase diesel fuel that meets the following requirements on a per-gallon basis: [40 CFR 60.4207(b) & 40 CFR 80.510(b)]

- a. Sulfur content: 15 ppm maximum;
- b. Cetane index or aromatic content, as follows:
 - i. A minimum cetane index of 40; or
 - ii. A maximum aromatic content of 35 volume percent.

48. *Installation Restrictions*

[40 CFR 60.4208]

- a. After December 31, 2008, the Permittee may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year. [40 CFR 60.4208(a)]
- b. After December 31, 2009, the Permittee may not install stationary CI ICE with a maximum engine power of less than 25 HP (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year. [40 CFR 60.4208(b)]
- c. In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in conditions 36.a and b after the dates specified in conditions 36.a and b. [40 CFR 60.4208(h)]
- d. The requirements of condition 48 do not apply to stationary CI ICE that have been modified or reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location. This provision does not extend to imported units which shall be treated as new sources. [40 CFR 4208(g) & (h)]

49. *Emergency Designation*

The Permittee must operate the emergency stationary ICE according to the requirements in in conditions 49.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 49.a through c is prohibited. If the Permittee does not operate the engine according to the requirements in conditions 49.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 60.4211(f)]

- a. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
- b. The Permittee may operate the subject emergency stationary ICE for as specified in condition 49.b.i for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in condition 49.c, counts as part of the 100 per calendar year allowed by this paragraph. [40 CFR 60.4211(f)(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 60.4211(f)(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 49.b. Except as provided in condition 49.c.i, 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 facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 60.4211(f)(3)]

i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[40 CFR 60.4211(f)(3)(i)]

- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.

Compliance Determination

[PCC 17.12.185.A.3, 4, & 5]

50. Operating Limitations

a. Hour Meter Installation and Hour Limitations

i. The Permittee of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines must install a non-resettable hour meter on each applicable stationary CI ICE prior to startup of each engine.

[40 CFR 60.4209(a)]

- ii. For each generator identified as having an hour limitation in Table 3 of Attachment 2, the Permittee shall record the monthly operating hours and recalculate a rolling twelve (12) month total within 10 calendar days of the end of the month. The Permittee shall maintain a record of the rolling twelve (12) month operating hour total for each engine with an operating hour limitation identified in the equipment list.

b. *Emergency and Non-Emergency Service - Times of Operation* [40 CFR 60.4214(b)]

Starting with the model years in the following table, if the emergency stationary ICE does not meet the standards applicable to a non-emergency unit for the same model year and horsepower, the Permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must also record the time of operation of the engine and the reason the engine was in operation during that time.

Engine Power	Model Year
$25 \leq HP < 75$	2013
$75 \leq HP < 175$	2012
$HP \geq 175$	2011

c. *Compliance*

- i. The Permittee must operate and maintain the applicable stationary CI ICE and control device (if applicable) according to the manufacturer's emission-related written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. In addition, the Permittee may only change those settings that are permitted by the manufacturer. [40 CFR 60.4211(a)]
- ii. With respect to 2007 model year and later stationary CI ICE subject to this Section, the Permittee shall demonstrate compliance with the emission standards specified in Table 3a of Attachment 2 by purchasing an engine certified to those standards of the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]

51. *Opacity*

- a. Opacity levels as provided in condition 46.a are to be measured and calculated as set forth in 40 CFR part 86, subpart I. Notwithstanding the provisions of 40 CFR Part 86, subpart I, two-cylinder nonroad engines may be tested using an exhaust muffler that is representative of exhaust mufflers used with the engines in use.
- b. The following engines are exempt from the requirements in condition 51.a above: [40 CFR 89.113 (c)(1) & (3)]
 - i. Single-cylinder engines;
 - ii. Constant-speed engines.
- c. The Permittee shall keep all records generated to show compliance with the opacity level measurement requirements in condition 51.a (if required).
- d. The Permittee shall conduct a visible emissions check on the exhaust stack of each generator at least monthly if run during the month. For the purposes of this Section, a visible emission check is verification that abnormal emissions are not present at the generator stack. The Permittee shall retain records of monthly visible emissions checks/observations that include the date and time of the check, the name of the person conducting the check, the results of the check, and the type of corrective action taken (if required). [PCC 17.12.185.A.3.d]

[Locally Enforceable Condition]

52. *Engines with Diesel Particulate Filter*

- a. If the Permittee owns or operates a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]
- b. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the Permittee must keep records of any corrective action taken after the backpressure monitor has notified the operator that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]

53. *Diesel Fuel Recordkeeping*

The Permittee shall maintain records that verify compliance with the diesel fuel requirements in condition 47.

54. *Reporting Requirements*

[40 CFR 60.4214(a)(1)]

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this Section in accordance with I.B of the General Conditions of this Permit.

Testing Requirements

[PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

55. Follow the testing requirements in condition 24 in addition to the following:

- a. Should the Permittee elect to or be required to conduct performance testing to demonstrate compliance with the applicable standards in this Section, the Permittee shall do so in accordance with 40 CFR 60.4212.

SECTION 7: SPECIFIC APPLICABILITY PROVISIONS

56. *Permitted Facility Sources*

The Specific Conditions in this permit apply to the following source categories, affected facilities, equipment, emission sources, installations, activities and operations at the facility.

a. *Facility-Wide Operations*

Section 2 of this permit applies to facility-wide operations and to all sources of air contaminants at the facility unless exempted under condition 58. The provisions include the following: Operating limitations, materials handling standards, odor limiting standard, opacity limit, visibility limiting standard, and asbestos requirements for renovation and demolition activities. In addition to the General Conditions contained in this permit, Section 2 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 17.16.010., PCC 17.16.020 thru 050, PCC 17.16.400.A & C, & PCC 17.16.430.F]

[Federally and Locally Enforceable Conditions]

b. *Fossil-Fuel Fired Industrial and Commercial Equipment (Boilers and Heaters)*

Section 3 of this permit applies to fossil-fuel fired industrial and commercial installations which are less than seventy-three megawatts capacity (two hundred fifty million British thermal units per hour); but in the aggregate on any premises are rated at greater than five hundred thousand British thermal units per hour (0.146 megawatts); and in which fuel is burned for the primary purpose of producing steam, hot water, hot air or other liquids, gases or solids and in the course of doing so the products of combustion do not come into direct contact with process materials. [PCC 17.16.165]

i. Operating limitations

[PCC 17.12.350.A.3.a]

[Material Permit Conditions]

(a) Applicable boilers, heaters, or other fuel fired equipment covered by this permit and identified in Table 1 of Attachment 2 that comply with Section 3 of this permit shall be considered to be compliant with the applicable requirements in NSPS, Subpart Dc and PCC 17.16.165.

[40 CFR 60.42c(d), 40 CFR 60.43c(e)(4), & 40 CFR 60.48(g) & PCC 17.16.165]

(b) Should the Permittee desire to fire fuels in a boiler, heater or other fuel fired equipment covered by this permit that do not meet the fuel limitations in Section 3 of this permit, the Permittee shall submit a significant revision in accordance with condition 21.

[40 CFR 60.43c(e)(1), 40 CFR 63.1194(d), 40 CFR 63.11201(a), & Table 2, to NESHAP Subpart JJJJJ]

c. *Stationary Rotating Machinery*

Section 4 of this permit applies to stationary rotating machinery. The reciprocating internal combustions at engines this facility are not subject to NESHAP standards in 40 CFR Part 63, Subpart ZZZZ subject to the following limitation: [PCC 17.12.350.A.3.a & PCC 17.16.340]

i. Operating limitations

[PCC 17.12.350.A.3.a]

[Material Permit Conditions]

(a) Applicable stationary rotating machinery in Table 2 are exempt from NESHAP Subpart ZZZZ requirements provided they are not operated for more than 100 hours for maintenance and readiness testing. Operation during true emergencies is not limited. [40 CFR 63.6640(f)]

d. *NSPS for Stationary Spark Ignition 'SI' Internal Combustion Engines 'ICE'*

40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. **[Federally Enforceable Conditions]**

- i. The provisions of this subsection and Section 5 of this permit are applicable to manufacturers, owners and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified below:
 - (a) 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 40 CFR 60, Subpart JJJJ, and where the date of manufacture is:
 - (i) On or after January 1, 2009, for emergency engines.
 - (b) Owners and Operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
 - (i) After January 1, 2009 for emergency engines with a maximum engine power greater than 19 KW (25 HP).
 - (c) 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.
 - (d) The installation restrictions in 40 CFR 60.4236 and condition 36 are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

e. *NSPS for Stationary Compression Ignition 'CI' Internal Combustion Engines 'ICE'*

40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) [PCC 17.16.490.A.81]
[Federally Enforceable Conditions]

- i. The provisions of this subsection and Section 6 of this permit are applicable to manufacturers, owners and operators of stationary CI ICE and other persons as specified below. For the purposes of condition 56.e, the date that construction commences is the date the engine is ordered by the owner or operator. [40 CFR 60.4200(a)]
 - (a) Manufacturers of stationary CI ICE with a displacement less than 30 liters per cylinder, where the model year is: [40 CFR 60.4200(a)(1)]
 - (i) 2007 or later, for engines that are not fire pump engines.
 - (b) Owners and Operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are: [40 CFR 60.4200(a)(2)]
 - (i) Manufactured after April 1, 2006, and are not fire pump engines.
 - (c) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005. [40 CFR 60.4200(a)(3)]
 - (d) The installation restrictions in 40 CFR 60.4208 and condition 48 are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005. [40 CFR 60.4200(a)(4)]

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

Local performance standards apply to the following equipment or operations at the facility: fossil fuel fired industrial and commercial equipment; each stationary internal combustion engine; each petroleum liquid storage tank of at least 250 gallons capacity, tanks and containers used to transport or store VOCs, each pump or compressor which handles VOC; and each unclassified source.

[PCC 17.12.185.A.2, PCC 17.16.165, PCC 17.16.230.B & D, PCC 17.16.340, PCC 17.16.400.A, & PCC 17.16.430]

[Locally Enforceable Conditions]

58. *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 17.12.140.C.3]

[Locally Enforceable Condition]

GENERAL CONDITIONS

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

1. *Compliance with Permit Conditions* [PCC 17.12.185.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 the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and 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 17.12.185.A.5 & PCC 17.12.040]

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 17.12.040.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.**

3. *Property Rights* [PCC 17.12.185.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 17.12.185.A.9 & PCC 17.12.520]

The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.520.

5. *Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause* [PCC 17.12.185.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 17.12.165.G & PCC 17.12.185.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 17.12.185.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.

ATTACHMENT 1 – APPLICABLE REGULATIONS

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

Subpart A	General Provisions
Subpart JJJJ	NSPS for Stationary Spark Ignition Internal Combustion Engines
Appendix A	Test Methods

Pima County Code Title 17, Chapter 17.12 – Permits and Permit Revisions

Article I – General Provisions

17.12.010	Statutory Authority
17.12.020	Planning, Constructing, or Operating Without a Permit
17.12.040	Reporting requirements
17.12.045	Test methods and procedures
17.12.050	Performance tests
17.12.080	Permit Display or Posting

Article II – Individual Source Permits

17.12.165	Permit application processing procedures for Class II and Class III permits
17.12.185	Permit contents for Class II and Class III permits
17.12.235	Facility Changes that require a permit revision
17.12.240	Procedures for certain changes that do not require a permit revision Class II or Class III
17.12.255	Minor Permit Revision
17.12.260	Significant Permit Revision
17.12.270	Permit Reopenings – Revocation and reissuance – Termination
17.12.350	Material permit condition

Article VI – Individual Source Permits

17.12.520	Fees related to Class II and Class III permits
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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 IV – New and Existing Stationary Source Performance Standards

17.16.130	Applicability
17.16.165	Standards of performance for fossil-fuel fired industrial commercial equipment
17.16.230	Standards of performance for storage vessels for petroleum liquids
17.16.340	Standards of performance for stationary rotating machinery
17.16.400	Organic solvents and other organic materials
17.16.430	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
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ATTACHMENT 2 – EQUIPMENT LIST

Equipment for which emissions are allowed by this permit are as follows:

Table 1 – Boilers & Heaters (ref. Section 3):

Equipment Number/ Location ¹	Description	MFR/ Model	Serial Number/ Unique ID	Maximum Rated Capacity	Date of MFR	Date Installed	Allowable Fuels and Annual Limits		Applicability ¹	
							Natural Gas	Fuel Oil	NSPS Subpart Dc	NESHAP Subpart JJJJJ
							(MMcf, hours, CF)	(Gallons, hours, CF)		
01	Boiler Central Plant	P-K Thermfic N3000-MFD	GY27-1135576	2.6 MMBtu/hr	7-15-2011	8-23-2011	Unlimited	N/A	N/A	N/A
02	Boiler Central Plant	P-K Thermfic N3000-MFD	GY27-1135574	2.6 MMBtu/hr	7-18-2011	8-23-2011	Unlimited	N/A	N/A	N/A
03	Boiler Central Plant	P-K Thermfic N3000-MFD	GY27-1135577	2.6 MMBtu/hr	7-18-2011	8-23-2011	Unlimited	N/A	N/A	N/A
04	Boiler Central Plant	P-K Thermfic N3000-MFD	GY27-1135575	2.6 MMBtu/hr	7-15-2011	8-23-2011	Unlimited	N/A	N/A	N/A
05	Water Heater Legal Services	Lochinvar OKN701	L12H10242740	0.65 MMBtu/hr	8-3-2002	7-22-2004	Unlimited	N/A	N/A	N/A
06	Water Heater Legal Services	Lochinvar OKN701	L12H10239071	0.65 MMBtu/hr	8-3-2002	7-22-2004	Unlimited	N/A	N/A	N/A
07	Water Heater Legal Services	Lochinvar OKN701	L12H10242741	0.65 MMBtu/hr	8-3-2002	7-22-2004	Unlimited	N/A	N/A	N/A
08	Water Heater Legal Services	Lochinvar OKN701	L12H10239086	0.65 MMBtu/hr	8-3-2002	7-22-2004	Unlimited	N/A	N/A	N/A
09	Boiler Main Library	RB1 FB1500	090643869	1.15 MMBtu	9-21-2006	10-1-2006	Unlimited	N/A	N/A	N/A
10	Boiler Main Library	RB1 FB1500	090643818	1.15 MMBtu	9-21-2006	10-1-2006	Unlimited	N/A	N/A	N/A

Table 2 – Stationary Rotating Machinery (ref. Sections 4):

Equipment Number	Description	MFR	Model	Serial Number/ Unique ID	Maximum Rated Capacity	Run Hour Limitation ¹	Fuels Used	Date of MFR	Date Installed
11	Emergency Generator Public Works	Kohler	180ROZJ71	271317	242 hp	100 hours	Diesel	8-24-1980	1-17-1981
12	Emergency Generator Central Plant	Cummins	625GFJB	GM05d075300	965 hp	100 hours	Natural Gas	6-2005	12-2-2005
13	Emergency Generator Legal Services	Cummins	GGLA5679195	G040668541	113 hp	100 hours	Natural Gas	8-3-2004	8-22-2004
14	Emergency Generator B of A	Magnaplus	432PSI1369	WA-509969-0597	445 hp	100 hours	Natural Gas	5-1-1997	8-7-1998

Table 3 – Generators / Emergency SI ICE subject to NSPS (ref. Section 5):

Equipment Number	Description	MFR	Model	Serial Number/ Unique ID	Maximum Rated Capacity	Run Hour Limitation ¹	Fuels Used	Date of MFR	Date Installed
15	Emergency Generator B of A	Olympian	G23OLG2	*GXD00633	357 hp	100 hours	Natural Gas	9-8-2010	1/7/2011

Table 4 – Generators / Emergency CI ICE subject to NSPS (ref. Section 6):

Equipment Number	Description	MFR	Model	Serial Number/ Unique ID	Maximum Rated Capacity	Run Hour Limitation ¹	Fuels Used	Date of MFR	Date Installed
16	Emergency Generator El Presido Garage	Cummins	DSHAD1409948	F140697735	331 hp	100 hours	Diesel	6-17-2014	6-28-2014
17	Emergency Generator Old Courts	Generac	8643850100	2094709	134 hp	100 hours	Diesel	8-22-2007	9-16-2007

¹ The run hours are limited to maintenance testing and readiness checks. There is no limit on hours of operation during true emergencies. Should the generators operate for non-emergency purposes to supply power as part of financial arrangement with another entity, the generators will be subject to NESHAP Subpart ZZZZ and the Permittee is required to submit a significant revision in accordance with condition 21.

Table 4a - Supplemental Requirements for Emergency CI ICE subject to NSPS (ref. Section 6):

Equipment Number	Applicable NSPS Emission Standards	NO _x (g/hphr)	NMHC (g/hphr)	NMHC+NO _x (g/hphr)	CO (g/hphr)	PM (g/hphr)	Useful Life (term, date)
16	Post Model 2007	--	--	3.0	2.6	0.15	8,000 hours or 10 years, whichever comes first.
17	Post Model 2007	--	--	3.0	3.7	0.22	8,000 hours or 10 years, whichever comes first

ATTACHMENT 3 - INSIGNIFICANT ACTIVITIES

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 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; provided such tanks are not affected GDF facilities or Bulk Plants subject to NESHAP subpart CCCCCC or subpart BBBBBB 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	≤ 40,000 gallons	
Batch mixers.	≤ 5 cubic feet	-
Wet sand and gravel production facilities whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any nonmetallic minerals.	≤ 200 tons/hour	-
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.	-	-
Trivial activities as provided in PCC 17.04.340.A.237 a through xx.	-	-

ATTACHMENT 4**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)	N. 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.