PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR PROGRAM

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

AIR QUALITY OPERATING PERMIT

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

CATERPILLAR INC.
TUCSON PROVING GROUNDS COMPLEX
6000 W. CATERPILLAR TRAIL
GREEN VALLEY, AZ 85614

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

Proposed Permit

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

PERMIT NUMBER **716**

PERMIT CLASS **II**

ISSUED: **December xx, 2015**

EXPIRES: **December xx, 2020**

Rupesh Patel, Air Permit Manger, PDEQ

SIGNATURE

TITLE

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PERMIT SUMMARY

This operating permit is the second individual air quality operating permit issued to Caterpillar Inc. – Tucson Proving Grounds and Tinaja Hills Demonstration and Application Center (TPG & THDAC) located at 6000 W. Caterpillar Trail, Green Valley, AZ 85614. The facility is a Class II synthetic minor source of CO and NO_x, a true minor source of all other criteria pollutants, and an area source of Hazardous Air Pollutants (HAPs). The facility operates in an area that is classified as attainment.

The facility operates under the following industrial classification:

- Construction Machinery Manufacturing, SIC code 3531 (NAICS 333120)

Caterpillar's Tucson Proving Ground (TPG) and Tinaja Hills Demonstration and Application Center (THDAC) rely on self-contained power generation for 100% of the electrical requirements. Fugitive dust producing activities may also be present at the facility.

The facility sources include 6 non-emergency generators and a boiler which provides process heating. The generators are diesel fired and subject to the federal NSPS standards, Subpart IIII.

The following emission rates are for reference purposes and are used to establish whether or not the source is a major source in terms of the Title V permit program. They are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of this permit.

The following table summarizes the potential to emit of the source with the limitations in the permit. These emission values are a taken from the information contained in the renewal application and from standard Tier 3 and Tier 4 emissions factors and emission factors in AP-42 Sections 1.3. The emission values are for information purposes only and are not intended to be enforceable limits.

Facility-Wide Potential Emissions of Pollutants [1] (tons/yr)										
Conventional or Criteria Air Pollutant								**NSPS**	**HAPs**	
$PM_{2.5}$	**PM_{10}**	**PM**	**NOx**	**VOC**	**CO**	**SO_2**	**Lead**	**N/A**	**Total**	**Single**
2.97	3.54	4.36	89.67	10.51	83.37	5.65	ND [2]	N/A	0.19	< 0.19

[1] Generator PTE is calculated on limited operation (6830 hours/year or Duty Cycle of 78%) while firing ultra-low sulfur diesel. Boiler PTE is calculated on unlimited operation (8760 hours/year) while firing fuel oil limited to less than 0.9% wt. Sulfur.

[2] No Data. These emissions are insignificant.

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SPECIFIC CONDITIONS

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

SECTION 1

GENERAL APPLICABILITY

I. Statutory Authority

The Specific and General Conditions contained in this air quality operating permit apply to the operations, equipment, and sources provided in the permit application and shall not relieve the Permittee or its subcontractors from compliance with all local, county, state, and federal laws, statutes, and codes or from obtaining permits for other operations or activities when required. [PCC 17.12.010.D & PCC 17.12.165]

II. Permitted Facility Sources

The Specific Conditions apply to the following source categories, affected facilities, equipment, emission sources, installations, activities and operations at the facility. Section 7 of this permit contains the specific conditions related to the applicability of facility sources.

A. Facility-Wide Operations

B. NSPS for Internal Combustion Engines 'ICE'

C. Fossil Fuel Fired Industrial and Commercial Equipment (Boilers and Heaters)

D. NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources

III. 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 for Stationary Internal Combustion Engines 'ICE'

Section 4 – Fossil Fuel Fired Industrial and Commercial Equipment (Boilers and Heaters)

Section 5 – NESHAP for Industrial, Commercial, and Institutional Boilers

Section 6 – Non-Point Fugitive Dust Control Standards

Section 7 – Specific Applicability Provisions

IV. 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]

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SECTION 2

FACILITY-WIDE OPERATIONS

In accordance with I.A of Section 7, the provisions of 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]

I. EMISSION LIMITS AND STANDARDS

A. Voluntary limitations

To avoid classification as a source that requires a Class I permit or triggering other applicable requirements, the Permittee shall comply with the voluntary limitations in I.A of Sections 3 and 4 of this permit. [PCC 17.12.190.B & 17.12.350.A.3.a]

[Federally Enforceable and Material Permit Conditions]

B. General Control Standards

1. 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]

2. The Permittee shall keep complete records of the materials used as fuel for any stationary or portable source of air pollution which burns any material except natural gas. [PCC 17.16.010.C]

3. The Permittee is prohibited from firing high sulfur oil in any stationary or portable source without submitting a revision, as provided in V 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 from firing high sulfur oil, the Specific Conditions contained in this permit may require lower fuel sulfur content limits for specific stationary or portable sources.
[PCC 17.12.185.A.2]

4. 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]

C. Materials Handling Standards

1. 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]

2. 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]

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D. Odor Limiting Standard

The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution. [PCC 17.16.030]

E. Opacity Limit

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.

[PCC 17.12.140.C.3, PCC 17.16.040, PCC 17.16.050.B, & PCC 17.16.130.B.1]

[This condition is Federally Enforceable when opacity is above 40%]

1. 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]

2. 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]

3. 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]

4. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements of I.E and I.F of this Section, I.E and I.F of this Section shall not apply. [PCC 17.16.040.B]

F. Visibility Limiting Standard [PCC 17.16.050]

1. 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.

2. 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.

   a. I.F.2 of this Section 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.

   b. I.F.2 of this Section shall not apply to the generation of airborne particulate matter from undisturbed land.

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G. Non-Point Fugitive Dust Control Standards [PCC 17.16.070 through PCC 17.16.120]

The Permittee shall comply with the Specific Conditions for emissions from new and existing non-point sources as provided in Section 6 of this permit.

H. Specific Authorization to Conduct Fugitive Dust Producing Activities [PCC 17.12.470.F & PCC 17.16.060]

1. The Permittee is responsible for controlling windblown dust, dust from haul roads, and dust emitted from land clearing, earthmoving, demolition, trenching, blasting, road construction, mining, racing event, and other activities to ensure compliance with I.E and I.F of this Section.

    a. Until the area becomes permanently stabilized by paving, landscaping or otherwise, dust emissions shall be controlled by applying adequate amounts of water, chemical stabilizer, or other effective dust suppressant.

    b. The Permittee shall not leave land in such a state that fugitive dust emissions (including windblown dust or dust caused by vehicular traffic on the area) would violate I.D or I.E of this Section.

2. This subsection shall not relieve the Permittee, or its subcontractors, from compliance with all local, county, state, and federal laws, statutes, and codes or from obtaining permits for other operations or activities when required. [PCC 17.12.010.D]

I. 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]

II. MONITORING REQUIREMENTS [PCC 17.12.185.A.3]

A. Fugitive Dust Control

To monitor compliance with I.E through I.H of this Section, the Permittee shall observe all facility wide point, non-point, or fugitive dust emission sources, including motor vehicle operations, open spaces, roads and streets, particulate materials handling operations, storage piles, and other sources not identified in Attachment 2, at least once a month while the facility is in operation and record the results of the observations and any corrective actions taken.

B. Visible Emissions (VE)

If at any time or while conducting an opacity check or observation required by the Specific Conditions of this permit the Permittee sees any plume or effluent from a facility source, that, on an instantaneous basis, appears to exceed 20% opacity, or 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, when practicable, make a visual determination of the opacity in accordance with EPA reference Method 9 using a certified visible emissions evaluator. If the VE determination exceeds the applicable opacity limit, or the emissions diffuse beyond the property boundary line, the Permittee shall report this as an excess emission in accordance with IV.A of this Section. [PCC 17.16.040]

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C. Except as otherwise contained in the Specific Conditions of this permit, additional monitoring for compliance with the facility-wide standards in I.A through I of 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 standards has been committed.

III. RECORDKEEPING REQUIREMENTS [PCC 17.12.185.A.4.a]

A. Monitoring Records

The Permittee shall maintain records of required monitoring information. Records shall include at a minimum: [PCC 17.12.184.A.4.a]

1. The date, time, and the place defined in the permit requiring the measurement, sampling, inspection, or observation;

2. The name of the person conducting the measurement, sampling, inspection or observation;

3. 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,

4. 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 record shall include the corrective action taken.

B. 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.

C. Recordkeeping for Compliance Determinations

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. [PCC 17.12.080, & PCC 17.24.020.A]

IV. REPORTING REQUIREMENTS [PCC 17.12.185.A.5]

A. Excess Emissions Reporting

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit in accordance with I.B of the General Conditions. [PCC 17.12.040]

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B. 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.

C. 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.

V. FACILITY CHANGES

A. 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 for any conventional pollutant, 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. [PCC 17.12.240.C.3, PCC 17.12.235, PCC 17.12.255, PCC 17.12.260]

B. 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 [PCC 17.12.240.C]

C. 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. [PCC 17.12.240.B]

VI. TESTING REQUIREMENTS [PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

For purposes of demonstrating compliance, these test methods shall be used, provided that for the purpose of establishing whether or not the facility has violated or is in violation of any provision of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable federal requirements if the appropriate performance or compliance procedures or methods had been performed. Unless otherwise noted, the following test methods and standards are from 40 CFR Part 60, Appendix A or incorporated by reference in 40 CFR §60.17.

A. 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. When required, 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.

C. Except as provided in this Section, should the Permittee desire to test or be required to test to demonstrate compliance with the standards contained in this permit, the Permittee shall contact the Control Officer for test methods and guidelines.

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SECTION 3

NSPS FOR STATIONARY INTERNAL COMBUSTION ENGINES 'ICE'

In accordance with I.B, of Section 7, the provisions in this Section apply to CI ICE listed in Tables 1 and 1a of Attachment 2. The General Provisions of 40 CFR Part 60, §§60.1 through 19 apply to applicable CI ICE sources as indicated in Table 8 of 40 CFR Part 60, Subpart IIII. All provisions of this Section are Federally Enforceable unless otherwise noted.

I. EMISSION LIMITATIONS AND STANDARDS [PCC 17.12.185.A.2]

A. Voluntary Generator(s) Run Hour Limitations

1. The Permittee shall not operate the generator(s) for more than the number of run hours per year specified in Table 1 of Attachment 2; or

2. The Permittee shall not exceed a combined duty cycle of 78% for the operation of the generators listed in Table 1 of Attachment 2. For the purpose of this provision the combined duty cycle for the generators is equal to the total annual run hours as measured on a rolling 12 month basis of all the generators, divided by the number of generators, divided by 8760, multiplied by 100.

[PCC 17.12.190]
[Material Permit Conditions]

B. Operational Limitations [40 CFR 60.4203, 40 CFR 4205(b) & 40 CFR 60.4202(a)]

1. Emissions Standards

   a. 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 during the certified emissions life of the engine.

   b. 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 during the certified emissions life of the engine.

   c. The applicable emission standards and the certified emissions life of the engine(s) is identified in the equipment list in Table 1a of Attachment 2.

   d. The Permittee must operate and maintain applicable units that achieve the emission standards as required in I.B.1.c 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]

2. **Opacity**

   a. Except for constant-speed engines, opacity shall not exceed:
   [40 CFR 60.4202(a)(1) & (a)(2), 40 CFR 89.113 & 40 CFR 1039.105]
   [Material Permit Condition]

      1. 20 percent during the acceleration mode;
      2. 15 percent during the lugging mode; and
      3. 50 percent during the peaks in either the acceleration or lugging modes.

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b. The Permittee shall not cause or permit the effluent from CI ICE to exceed the facility wide opacity limits in I.D of Section 2 of this permit. [PCC 17.16.040.A]

[Locally Enforceable Condition]

C. 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)]

1. Sulfur content: 15 ppm maximum;

2. Cetane index or aromatic content, as follows:

   a. A minimum cetane index of 40; or

   b. A maximum aromatic content of 35 volume percent.

D. Installation Restrictions [40 CFR 60.4208]

1. Stationary CI ICE (excluding fire pump engines)

   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)]

2. Non-Emergency Stationary CI ICE

   a. After December 31, 2012, the Permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 175 HP, including those above 750 HP, that do not meet the applicable requirements for 2011 model year non-emergency engines. [40 CFR 60.4208(e)]

   b. After December 31, 2013, the Permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 75 HP and less than 175 HP that do not meet the applicable requirements for 2012 model year non-emergency engines. [40 CFR 60.4208(d)]

   c. After December 31, 2014, the Permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 25 HP and less than 75 HP that do not meet the applicable requirements for 2013 model year non-emergency engines. [40 CFR 60.4208(c)]

   d. After December 31, 2016, the Permittee may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 750 HP that do not meet the applicable requirements for 2015 model year non-emergency engines. [40 CFR 60.4208(f)]

   e. After December 31, 2018, the Permittee may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 804 HP (600 KW) and less than 2,680 HP (2,000 KW) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines. [40 CFR 60.4208(g)]

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3. The requirements of I.D.1 and 2 of this Section 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)]

E. Compliance [40 CFR 60.4211]

1. 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)]

2. 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 Tables 1a 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)]

II. MONITORING REQUIREMENTS [PCC 17.12.185.A.3.d]

A. Voluntary Generator(s) Run Hour Limitation

1. Hour Meter Installation

   The Permittee must install a non-resettable hour meter on each stationary non-emergency CI ICE prior to startup of each engine.

2. For each generator identified as having an hour limitation in Table 1 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 monitor and ensure the annual run hours do not exceed the generator run hour limits or combined duty cycle percent as provided in I.A. of this Section. [PCC 17.12.185.A.3.d]

   [Locally Enforceable Condition]

B. Diesel Particulate Filter

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)]

C. Opacity

1. Opacity levels in I.B.2.a of this Section 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. [40 CFR 89.113(b)]

2. The following engines are exempt from the requirements above in II.C.1 of this Section: [40 CFR 89.113 (c)(1) & (3)]

   a. Single-cylinder engines;

   b. Constant-speed engines.

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3. 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 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). [PCC 17.12.185.A.3.d]

[Locally Enforceable Condition]

III. RECORDKEEPING REQUIREMENTS [PCC 17.12.185.A.4]

A. Hourly Operational Records

Permittee shall maintain a record of the total operating hours for all generators listed in Table 1 of Attachment 2 to demonstrate compliance with I.A and II.A of this Section. Additionally the Permittee shall maintain a record of the rolling twelve (12) month operating hour total for each generator with an operating hour limitation identified in Table 1 of Attachment 2.

B. Manufacturer Certifications

The Permittee shall maintain records of manufacturer certification that identify the applicable emission limits for the appropriate model year and maximum engine power and certify the applicable units to those standards.

C. Diesel Fuel Recordkeeping

The Permittee shall maintain records that verify compliance with the diesel fuel requirements in I.C of this Section. [PCC 17.12.185.4]

D. Opacity

1. The Permittee shall keep all records generated to show compliance with the opacity level measurement requirements of II.C.1 of this Section (if required).

2. The Permittee shall retain records of visible emissions checks in II.C.3 of this Section. 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). [PCC 17.12.185.A.3.d]

[Locally Enforceable Condition]

E. Diesel Particulate Filter

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)]

IV. REPORTING REQUIREMENTS [40 CFR 60.4214(a)(1) & PCC 17.12.185.A.5]

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. [PCC 17.12.185.A.5 & PCC 17.12.040]

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V. TESTING REQUIREMENTS [PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

A. Follow the testing requirements in VI of Section 2 of this permit.

B. Engine Performance Testing

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.

Proposed Permit

SECTION 4

FOSSIL FUEL FIRED INDUSTRIAL AND COMMERCIAL EQUIPMENT (BOILERS AND HEATERS)

In accordance with I.C of Section 7 of this permit, the provisions of this Section are applicable to boilers, heaters, and other fuel fired equipment identified on the equipment list in Table 2 of Attachment 2. In addition to the following provisions, the general provisions of 40 CFR Part 60 and 63, Subpart A apply to affected boilers as applicable. All Provisions of this section are locally enforceable unless otherwise noted. [PCC 17.16.010.B]

I. EMISSION LIMITATIONS AND STANDARDS [PCC 17.12.185.A.2]

A. Fuel Limitations

The Permittee shall burn only the following fuels in each boiler, heater, or other fuel fired equipment listed in Table 2 of Attachment 2, subject to the following limitations: [PCC 17.12.350.A.3.a]

[Material Permit Conditions]

1. Natural Gas

a. There are no operating hours or fuel limitations for equipment, boilers or heaters 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 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 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]

b. The Permittee shall not co-fire fuel oil and natural gas simultaneously in any dual fired boiler unless complying with each provision in I.A.2 of this Section. [40 CFR 63.11223(a)]

2. Fuel Oil

a. The Permittee shall not fire a volume of fuel oil in excess of the yearly volume allowed, or in excess of the annual capacity factor identified in Table 1 of Attachment 2. [PCC 17.12.140.B.1.a]

[Federally Enforceable Condition]

b. The Permittee shall not burn fuel oil that contains greater than 0.5 weight percent sulfur (5000 ppm_{mass}) in NSPS affected boilers with a maximum design heat input capacity greater than 30 MMBtu/hr that commenced construction or reconstruction after February 28, 2005 or new NESHAP affected boilers greater than 10 MMBtu/hr. For the purpose of this provision distillate fuels meeting the specifications for Number 1 and Number 2 fuel oils per ASTM D-396, or diesel fuel oils Numbers 1-D and 2-D per ASTM D-975 shall be considered to comply with this requirement. [40 CFR 60.42c(d), & 40 CFR 63.11210(e)]

[Federally Enforceable Condition]

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c. Unless the Permittee complies with Section 5 of this permit, the Permittee shall only burn liquid fuels in dual fired boiler(s) during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. For the purpose of this provision, the periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year. A "period of gas curtailment or supply interruption" means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

[40 CFR 63.11195(e) & 40 CFR 63.11237]

[Federally Enforceable Condition]

B. Opacity Limit

The opacity of all plumes and effluents from equipment listed in Table 2 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]

II. MONITORING AND RECORDKEEPING REQUIREMENTS

[PCC 17.12.185.A.3]

A. Natural Gas Consumption

For each NSPS affected steam generating unit (boiler) listed in Table 2 of Attachment 2 that fires natural gas the Permittee shall determine and record the total monthly amount of natural gas combusted (delivered) in the boiler, each calendar month. The volume of natural gas consumption shall be measured directly from the flow meter upstream of the boiler. [40 CFR 60.48c(g)]

[Federally Enforceable and Material Permit Condition]

B. Fuel Oil Consumption

For each boiler listed in Table 2 of Attachment 2 designed to accommodate fuel oil, the Permittee shall, monitor and keep records of the fuel oil supplier certifications. In addition, for each boiler that has a fuel oil limitation, the Permittee shall keep records of the monthly volume of fuel oil used and hours each boiler is fired when using fuel oil. If the boiler is a dual fired boiler that operates as a gas fired unit, the Permittee shall keep additional records on the purpose for firing fuel oil (i.e. gas curtailment, gas supply interruption, startup, or periodic testing on liquid fuel) to demonstrate compliance with I.A.2.c. For boilers that are not equipped with a means to meter or measure the volume of fuel oil delivered, the fuel oil usage, in gallons, shall be calculated and recorded using the maximum firing rate of the boiler multiplied by the hours operated while burning fuel oil, divided by 0.137 MMBtu/gallon of fuel oil.

[PCC 17.12.190.B, 40 CFR 60.48(g), 40 CFR 63.11237 & 40 CFR 63.11195]

[Material Permit Condition]

C. Annual Capacity Factor

The Permittee shall monitor and record the monthly volume of fuel oil used and the annual capacity factor of each boiler subject to a fuel oil limitation for compliance with I.A.2.a of this Section. For the purpose of this provision, the annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months. [PCC 17.12.190.B]

[Material Permit Condition]

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D. Opacity

The Permittee shall conduct a visible emissions check on the exhaust stack of each boiler or heater designed to accommodate fuel oil at least once during startup and each monthly period when the boiler or heater fires fuel oil. 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).

III. REPORTING REQUIREMENTS [PCC 17.12.185.A.5]

Follow the reporting requirements in IV.A through C of Section 2 of this permit.

V. TESTING REQUIREMENTS [PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

A. Follow the testing requirements in VI of Section 2 of this permit.

B. Documentation, such as invoices or statements from the fuel supplier, showing that the fuel sulfur content is below the applicable standards shall be an acceptable means to demonstrate compliance with fuel sulfur limitations identified in this Section. If otherwise required, or when requested by the Control Officer, the fuel sulfur content of fuels shall be determined using ASTM D-129-91 or an equivalent for liquid fuels, and ASTM D0172-90 or an equivalent for gaseous fuels.

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SECTION 5

NESHAP FOR INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL STEAM GENERATING UNITS (BOILERS) – OIL SUBCATEGORY

In accordance with I.C, and I.D of Section 7 of this permit, the provisions of this Section are applicable to new, reconstructed, or existing oil-fired boilers that are identified as applicable to NESHAP Subpart JJJJJJ in Table 2 of Attachment 2. The general provisions of §63.1 through §63.15 apply to affected boilers as indicated in Table 8 to NESHAP Subpart JJJJJJ. The provisions of this Section are Federally Enforceable unless otherwise noted.

[PCC 17.16.010.B]

[40 CFR Part 63, Subpart JJJJJJ is implemented by the United States Environmental Protection Agency]

I. EMISSION LIMITATIONS AND MANAGEMENT PRACTICES [PCC 17.12.185.A2]

A. Operation and Maintenance Requirement

At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Control Officer that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11205(a)]

B. Emission Limits

1. The Permittee must comply with each emission limit specified in Table 1 of 40 CFR Part 63, Subpart JJJJJJ that applies to the Permittee's boiler, as stated in the table below.

[PCC 17.12.190.B & 40 CFR 63.11211(a) & Table 1 of 40 CFR Part 63, Subpart JJJJJJ]

TABLE 1

EMISSION LIMITS

If your boiler is in this subcategory…	Pollutant	Limit	Monitoring
New – Small (<10MMBtu/hr)	n/a	n/a	(See Below)
1. New oil-fired boilers (> 10 MMBtu/hr) that do not meet the definition of limited use boiler.	PM (Filterable)	0.03 lb/MMBtu of heat input	The Permittee must submit a Significant Permit Revision to fire residual oils with greater than 0.5 weight percent sulfur in new NESHAP affected boilers.
New or reconstructed oil-fired boilers that combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuel not subject to a PM emission limit under 40 CFR Part 63, Subpart JJJJJJ and that do not use a post-combustion technology (except a wet scrubber) to reduce PM or sulfur dioxide emissions, are not subject to the PM emission limit in Table 1 of 40 CFR Part 63, Subpart JJJJJJ, providing the Permittee monitors and records on a monthly basis the type of fuel combusted. [40 CFR 63.11210(e)]			The Permittee monitors and records on a monthly basis the type of fuel combusted as provided in II.B and II.C of Section 4 of this permit. [PCC 17.12.190.B]

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2. These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in 63.11237, during which time the Permittee must comply only with Table 2 of 40 CFR Part 63, Subpart JJJJJJ, as listed in I.C.1 of this Section. [40 CFR 63.11201(d)]

C. Work Practice, Emission Reduction Measures, and Management Practices

1. The Permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 of 40 CFR Part 63, Subpart JJJJJJ that applies to the Permittee's boiler, as listed in the table below. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement [40 CFR 63.11201(b)]

TABLE 2

WORK PRACTICE STANDARDS, EMISSION REDUCTION MEASURES AND MANAGEMENT PRACTICES

If your boiler is in this subcategory…	You must meet the following …
1. Existing or new oil-fired boilers (> 10 MMBtu/hr)	Minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
4. Existing oil-fired boilers with heat input capacity greater than 5 MBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.
5. New oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited use boiler, or use an oxygen trim system that maintains an optimum air-to fuel ratio.	Conduct a tune-up of the boiler biennially as specified in §63.11223.
8. Existing seasonal boilers	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223
9. New seasonal boilers	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.

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TABLE 2 (Continued) If your boiler is in this Subcategory…	You must meet the following …
10. Existing limited-use boilers	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
11. New limited-use boilers	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
12. Existing oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
13. New oil-fired boilers with heat input capacity of equal to or less than 5 MMBtu/hr	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
14. Existing oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
15. New oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up	Conduct a tune-up of the boiler every 5 years as specified in §63.11223.
16. Existing oil-fired boilers (units with heat input capacity of 10 MMBtu/hr and greater), not including limited-use boilers	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237:
	(1) A visual inspection of the boiler system,
	(2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
	(3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
	(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
	(5) A list of major energy conservation measures that are within the facility's control,
	(6) A list of the energy savings potential of the energy conservation measures identified, and
	(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

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2. These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in 40 CFR 63.11237, during which time the Permittee must comply only with Table 2 of 40 CFR Part 63, Subpart JJJJJJ, as stated in I.C of this Section. [40 CFR 63.11201(d)]

II. COMPLIANCE REQIREMENTS

A. Initial Compliance Requirements

1. For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in 40 CFR 63.11196, as stated in I.D.2 of Section 7 of this permit, except as provided in II.A.5 of this Section. [40 CFR 63.11210(c)]

2. For new or reconstructed oil-fired boilers that combust only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM emission limit under this subpart and that do not use a post-combustion technology (except a wet scrubber) to reduce particulate matter (PM) or sulfur dioxide emissions, you are not subject to the PM emission limit in Table 1 of this subpart providing you monitor and record on a monthly basis the type of fuel combusted. If you intend to burn a new type of fuel or fuel mixture that does not meet the requirements of this paragraph, you must conduct a performance test within 60 days of burning the new fuel. [40 CFR 63.11210(e)]

3. For new or reconstructed affected boilers that have applicable work practice standards or management practices, you are not required to complete an initial performance tune-up, but you are required to complete the applicable biennial or 5-year tune-up as specified in §63.11223 no later than 25 months or 61 months, respectively, after the initial startup of the new or reconstructed affected source. [40 CFR 63.11210(f)]

4. For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJJ or the boiler becoming subject to subpart JJJJJJ, you must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to §63.11225(g). [40 CFR 63.11210(h)]

5. For existing affected boilers that have not operated between the effective date of the rule and the compliance date that is specified for your source in 40 CFR 63.11196, you must comply with the applicable provisions as specified in II.A.5.a and b this Section. [40 CFR 63.11210(j)]

   a. The Permittee must complete the initial performance tune-up, if subject to the tune-up requirements in II.B of this Section, by following the procedures described in II.B.2 no later than 180 days after the re-start of the affected boiler and according to the applicable provisions in §63.7(a)(2).

   b. The Permittee must complete the one-time energy assessment, if subject to the energy assessment requirements specified in Table 2 to this Section, no later than 30 days after the restart of the affected boiler.

6. The Permittee must conduct a performance tune-up according to II.B.2 of this Section, and the Permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the Permittee conducted a tune-up of the boiler. [40 CFR 63.11214(b)]

7. If the Permittee operates an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, the Permittee must submit a signed certification in the Notification of Compliance

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Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility. [40 CFR 63.11214(c)]

B. Continuous Compliance Requirements

1. For affected sources subject to the work practice standard or the management practices of a tune-up, the Permittee must conduct a performance tune-up according to II.B.2.a through g of this Section, and keep records as required in 40 CFR 63.11225(c), as stated in IV.C.1 of this Section, to demonstrate continuous compliance. The Permittee must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. [40 CFR 63.11223(a)]

2. Except as specified in II.B. 3 through 6 of this Section, the Permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in II.B.2.a through g. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler. [40 CFR 63.11223(b)]

<u>Tune Up Procedures</u>

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. [40 CFR 63.11223(b)(1)]

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. [40 CFR 63.11223(b)(2)]

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. [40 CFR 63.11223(b)(3)]

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. [40 CFR 63.11223(b)(4)]

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR 63.11223(b)(5)]

f. Maintain on-site and submit, if requested by the Administrator, a report containing the following information in II.B.2.f.i through iii. [40 CFR 63.11223(b)(6)]

   i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. [40 CFR 63.11223(b)(6)(i)]

   ii. A description of any corrective actions taken as a part of the tune-up of the boiler. [40 CFR 63.11223(b)(6)(ii)]

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iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11223(b)(6)(iii)]

g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. [40 CFR 63.11223(b)(7)]

3. *Boilers with an oxygen trim system* that maintain an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up must conduct a tune-up of the boiler every 5 years as specified in II.B.2.a through g of this Section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. The Permittee may delay the burner inspection specified in II.B.2.a of this Section and inspection of the system controlling the air-to-fuel ratio specified in paragraph II.B.2.c of this Section until the next scheduled unit shutdown, but the Permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. [40 CFR 63.11223(c)]

4. *Seasonal boilers* must conduct a tune-up every 5 years as specified in II.B.2.a through g of this Section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed seasonal boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in II.B.2.a of this Section and inspection of the system controlling the air-to-fuel ratio specified in paragraph II.B.2.c of this Section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Seasonal boilers are not subject to the emission limits in Table 1 to this subpart or the operating limits in Table 3 to this subpart. [40 CFR 63.11223(d)]

5. *Oil-fired boilers with a heat input capacity of equal to or less than 5 million Btu per hour* must conduct a tune-up every 5 years as specified in II.B.2.a through g of this Section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed oil-fired boiler with a heat input capacity of equal to or less than 5 million Btu per hour, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in II.B.2.a of this Section and inspection of the system controlling the air-to-fuel ratio specified in paragraph II.B.2.c of this Section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. [40 CFR 63.11223(e)]

6. *Limited-use boilers* must conduct a tune-up every 5 years as specified in II.B.2.a through g of this Section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed limited-use boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in II.B.2.a of this Section and inspection of the system controlling the air-to-fuel ratio specified in paragraph II.B.2.c of this Section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. Limited-use boilers are not subject to the emission limits in Table 1 to this subpart, the energy assessment requirements in Table 2 to this subpart, or the operating limits in Table 3 to this subpart. [40 CFR 63.11223(f)]

III. MONITORING REQUIREMENTS

Comply with the monitoring provisions in II.B and Cof Section 4 of this permit.

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IV. NOTIFICATION, REPORTING, AND RECORDKEEPING REQUIREMENTS

A. Notifications Requirements

The Permittee must submit the notifications specified in IV.A.1 and 2 of this Section to the Administrator.

1. The Permittee must submit an Initial Notification as required in 40 CFR 63.9(b)(2) no later than January 20, 2014 or within 120 days after the source becomes subject to the standard. [40 CFR 63.11225(a)(2)]

2. The Permittee must submit the Notification of Compliance Status in accordance with 40 CFR 63.9(h) no later than 120 days after the applicable compliance date specified §63.11196, as stated in I.D.2 of Section 7 of this Permit, unless you must conduct a performance stack test. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance Status in accordance with IV.A.2.a & e of this Section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs IV.A.2.a through e of this Section, as applicable, and signed by a responsible official. [40 CFR 63.11225(a)(4)]

   a. You must submit the information required in 40 CFR 63.9(h)(2), except the information listed in 40 CFR 63.9(h)(2)(i)(B), (D), (E), and (F). [40 CFR 63.11225(a)(4)(i)]

   b. "This facility complies with the requirements in 40 CFR 63.11214 to conduct an initial tune-up of the boiler." [40 CFR 63.11225(a)(4)(ii)]

   c. "This facility has had an energy assessment performed according to 40 CFR 63.11214(c)." [40 CFR 63.11225(a)(4)(iii)]

   d. For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." [40 CFR 63.11225(a)(4)(v)]

   e. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. [40 CFR 63.11225(a)(4)(vi)]

B. Reporting Requirements

1. The Permittee must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in IV.B.1.a through c of this Section. [40 CFR 63.11225(b)]

   a. Company name and address. [40 CFR 63.11225(b)(1)]

   b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: [40 CFR 63.11225(b)(2)]

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i. "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." [40 CFR 63.11225(b)(2)(i)]

ii. For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." [40 CFR 63.11225(b)(2)(ii)]

c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken. [40 CFR 63.11225(b)(3)]

2. The Permittee shall maintain on-site and submit, if requested by the Administrator, a report containing the following information in II.B.2.a through c. [40 CFR 63.11223(b)(6)]

a. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. [40 CFR 63.11223(b)(6)(i)]

b. A description of any corrective actions taken as a part of the tune-up of the boiler. [40 CFR 63.11223(b)(6)(ii)]

c. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.11223(b)(6)(iii)]

C. Recordkeeping Requirements

1. The Permittee must maintain the records specified in IV.C.a and e of this Section. [40 CFR 63.11225(c)]

a. As required in 40 CFR 63.10(b)(2)(xiv), the Permittee must keep a copy of each notification and report that the Permittee submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted. [40 CFR 63.11225(c)(1)]

b. The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 40 CFR 63.11223 as specified in paragraphs IV.C.1.b.i through iv of this Section. [40 CFR 63.11225(c)(2)]

i. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. [40 CFR 63.11225(c)(2)(i)]

ii. For each boiler required to conduct an energy assessment, you must keep a copy of the energy assessment report. [40 CFR 63.11225(c)(2)(iii)]

iii. For each boiler that meets the definition of seasonal boiler, you must keep records of days of operation per year. [40 CFR 63.11225(c)(2)(iv)]

iv. For each boiler that meets the definition of limited-use boiler, you must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating. [40 CFR 63.11225(c)(2)(vi)]

c. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. [40 CFR 63.11225(c)(4)]

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d. Records of action taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205, as stated in I.A of this Section, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal manner of operation. [40 CFR 63.11225(c)(5)]

e. A copy of the report required in II.B.2.f and IV.B.2. [40 CFR 63.11223(b)(6)]

2. The Permittee's records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years. [40 CFR 63.11225(d)]

3. If The Permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within subpart JJJJJJ, in the boiler becoming subject to subpart JJJJJJ, or in the boiler switching out of subpart JJJJJJ due to a change to 100 percent natural gas, or the Permittee has taken a permit limit that resulted in you being subject to subpart JJJJJJ, the Permittee must provide notice of the date upon which the Permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify: [40 CFR 63.11225(g)]

a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.

b. The date upon which the fuel switch, physical change, or permit limit occurred.

V. TESTING REQUIREMENTS [PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

A. Comply with the testing requirements in VI of Section 2 of this permit.

B. When required, documentation, such as invoices or statements from the fuel supplier, showing that the fuel sulfur content is below the applicable standards shall be an acceptable means to demonstrate compliance with fuel sulfur limitations identified in this Section. If otherwise required or when requested by the Control Officer, the fuel sulfur content shall be determined using ASTM D-129-91 or an equivalent for liquid fuels, and ASTM D0172-90 or an equivalent for gaseous fuels.

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SECTION 6

EMISSIONS FROM NEW AND EXISTING NONPOINT SOURCES

(FUGITIVE DUST)

I. 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.

II. 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 I.E or I.F of Section 2 of this 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 I.E. or I.F of Section 2 of this permit.

III. 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 I.E or I.F of Section 2 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.

Proposed Permit

IV. 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.

V. 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 I.E and I.F of Section 2 of this permit.

VI. Mineral Tailings [PCC 17.16.120]

A. The Permittee shall not cause, suffer, allow or permit construction of mineral tailings piles without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne. Reasonable precautions shall mean wetting, chemical stabilization, revegetation, or such other measures as are approved by the control officer.

B. The Permittee shall not cause, suffer allow, or permit construction of mineral tailings piles without taking reasonable precautions (i.e. wetting. chemical stabilization and revegetation) to minimize and control to ensure compliance with I.E and I.F of Section 2 of this permit.

Proposed Permit

SECTION 7

SPECIFIC APPLICABILITY PROVISIONS

I. 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

Except as provided in I.F of this Section, the following general provisions apply to facility-wide operations and to all sources of air contaminants operating at the facility: voluntary limitations, general control standards, materials handling standards, odor limiting standard, opacity standard, visibility limiting standard, non-point fugitive dust control standards, specific authorization to conduct fugitive dust producing activities, and asbestos requirements for demolition and renovation activities.
[PCC 17.12.470.F, PCC 17.12.475, PCC 17.12.190.B, PCC 17.16.010., PCC 17.16.020 thru 120, PCC 17.16.400.A, & PCC 17.16.430.F]

[Locally & Federally Enforceable Conditions]

B. New Source Performance Standards (NSPS) for Stationary Internal Combustion Engines 'ICE'

40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [PCC 17.16.490.A.81]

[Federally Enforceable Conditions]

1. Applicable to manufacturers, owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified below. For the purpose of II.B of this section, 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 provisions of I.D of Section 3 of this permit are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005. [40 CFR 60.4200(a)(4)]

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

1. This section applies to existing 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.

Proposed Permit

2. Voluntary Requirements [PCC 17.12.190.B]

[Voluntary and Material Permit Conditions]

a. Applicable steam generating units (boilers) identified in Table 1 of Attachment 3 that comply with Section 4 of this permit shall be considered to be compliant with the applicable requirements in 40 CFR 60, 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. Oil fired boilers must comply with Section 5 of this Permit in addition to Section 4. Oil fired boilers identified in Attachment 2 that comply with Sections 4 and 5 of this permit shall be considered to be compliant with the applicable requirements in 40 CFR 63, Subpart JJJJJJ and PCC 17.16.165. [40 CFR 63.11200 & 63.11237]

c. Should the Permittee desire to fire fuels in a boiler that do not meet the fuel limitations in Sections 2 and 4 of this permit, the Permittee shall submit a significant revision in accordance with V.A of Section 2 of this permit.
[40 CFR 60.43c(e)(1), 40 CFR 63.1194(d), 63.11201(a), & Table 2, to NESHAP Subpart JJJJJJ]

D. NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources

40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. **[Federally Enforceable Conditions]**
[This Subpart is implemented by the United States Environmental Protection Agency]

1. Affected Sources

a. Applicable to owners and operators of industrial, commercial, or institutional boilers as defined in §63.11237 that are located at, or part of, an area source of hazardous air pollutants (HAP), as defined in §63.2, except as specified in §63.11195. [40 CFR 63.11193]

b. Applicable to each new, reconstructed , or existing affected source as defined in II.D.1.b.i.and ii below: [40 CFR 63.11194(a)]

i. The affected source is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in §63.11200 and defined in §63.11237, located at an area source. [40 CFR 63.11194(a)(1)]

ii. The affected source is each new or reconstructed industrial, commercial, or institutional boiler within a subcategory, as listed in §63.11200 and as defined in §63.11237, located at an area source. [40 CFR 63.11194(a)(2)]

c. An affected source is an "existing" source if construction or reconstruction was commenced on or before June 4, 2010. [40 CFR 63.11194(b)]

d. An affected source is a new source if construction was commenced after June 4, 2010, and the boiler meets the applicability criteria at the time construction commenced. [40 CFR 63.11194(c)]

e. An affected source is a reconstructed source if the boiler meets the reconstruction criteria as defined in §63.2, reconstruction commenced after June 4, 2010, and the boiler meets the applicability criteria at the time reconstruction commenced. [40 CFR 63.11194(d)]

f. An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in §63.11237, that meets the applicability requirements of this subpart after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel. [40 CFR 63.11194I]

Proposed Permit

2. Compliance Dates

a. If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in I.D as specified in I.C.2.a. through c of this Section.

i. If the existing affected boiler is subject to a work practice or management practice standard of a tune-up, you must achieve compliance with the work practice or management practice standard no later than March 21, 2014.

ii. If the existing affected boiler is subject to emission limits, you must achieve compliance with the emission limits no later than March 21, 2014.

iii. If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

b. If you start up a new affected source on or before May 20, 2011, you must achieve compliance with the provisions of this subpart no later than May 20, 2011.

c. If you start up a new affected source after May 20, 2011, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

E. Local (New and Existing) Stationary Source Performance Standards

Local stationary performance standards apply to the following facilities or operations: Fossil fuel fired industrial and commercial equipment, each stationary internal combustion engine, and each unclassified source. [PCC 17.12.185.A.2, PCC 17.16.165, PCC 17.16.340, & PCC 17.16.430]

[Locally Enforceable Conditions]

F. Exempt Sources

The Specific Conditions contained in this air quality operating permit shall not apply to motor vehicles, agricultural vehicles, or 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]

Proposed Permit

GENERAL CONDITIONS

I. 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. 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: [PCC 17.12.185.A.5 & PCC 17.12.040]

1. 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.**

2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under I.B.1 above. **Send to PDEQ 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701.**

C. 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.

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

E. The Permittee shall pay fees to the Control Officer pursuant to PCC 17.12.520.
[PCC 17.12.185.A.9 & PCC 17.12.520]

II. 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.

III. 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.

IV. 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.

Proposed Permit

ATTACHMENT 1

APPLICABLE REGULATIONS

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

Subpart A	General Provisions
Subpart IIII	NSPS for Stationary Compression Ignition Internal Combustion Engines
Appendix A	Test Methods

40 CFR Part 63 National Emission Standards for Hazardous Air Pollutants for Source Categories

Subpart A	General Provisions
Subpart JJJJJJ	NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources

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
17.12.190	Permits containing synthetic emission limitations and standards
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 III – Emissions from Existing and New Nonpoint Sources

17.16.060	Fugitive dust producing activities
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
17.16.120	Mineral tailings

Article VI – Individual Source Permits

17.12.520	Fees related to Class II and Class III permits

Proposed Permit

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
17.16.340	Standards of performance for stationary rotating machinery
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:

17.24.020	Recordkeeping for compliance determination

Proposed Permit

ATTACHMENT 2

EQUIPMENT LIST AND AFFECTED OPERATIONS

Facility-Wide Operations that have specific monitoring and recordkeeping requirements (ref Section 2)

- **Fugitive Dust Control**
- **Visible Emissions**

Table 1 – Generators (ref. Section 3)

Equipment Number	Description	MFR	Model	Serial Number/ Unique ID	Maximum Rated Capacity	Run Hour Limitation[1]	Fuels Used	Date of MFR	Date Installed
01	Non-Emergency Generator	Caterpillar	C15	G7A02770	626 hp	6830 hours	Diesel	5/4/2009	Aug-2009
02	Non-Emergency Generator	Caterpillar	C15	G7A02769	626 hp	6830 hours	Diesel	5/4/2009	Aug 2009
03	Non-Emergency Generator	Caterpillar	C15	G7A02769	626 hp	6830 hours	Diesel	5/4/2009	Aug 2009
04	Non-Emergency Generator	Caterpillar	C15	T4A00807	790 hp	6830 hours	Diesel	8/11/2014	Jan-2015
05	Non-Emergency Generator	Caterpillar	C15	T4A00808	790 hp	6830 hours	Diesel	9/2/2014	Jan-2015
06	Non-Emergency Generator	Caterpillar	C15	T4A00809	790 hp	6830 hours	Diesel	8/28/2014	Jan-2015

[1] The Permittee can optionally comply with a combined duty cycle of 78% for the generators. The combined duty cycle percentage for Table 1 = the total annual operating hours of all applicable generators divided by the number of generators divided by 8760 hours times 100.

Table 1a – Emission Standards and the Certified Emissions Life (ref. Section 3)

Equipment Number	Applicable NSPS Emission Standards	NO_x (g/hphr)	NMHC (g/hphr)	NMHC+NOx (g/hphr)	CO (g/hphr)	PM (g/hphr)	Certified Emissions Life (term, date)
Units 01 thru 03	Post Model 2007 (2009) Tier 3	--	--	3.0	2.6	0.15	8,000 hours or 10 years, whichever comes first.
Units 04- thru 06	Post Model 2007 (2014) Tier 4	2.6	0.30	--	2.6	0.075	8,000 hours or 10 years, whichever comes first.

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Table 2 – Boilers & Heaters (ref. Sections 4 and 5)

Equipment Number	Description	MFR/Model Model	Serial Number/ Unique ID	Maximum Rated Capacity	Date of MFR	Date Installed	Allowable Fuels and Annual Limits		Applicability [1]	
							Natural Gas (MMcf [2], hours, CF)	Fuel Oil (Gallons, hrs, CF [3], % S)	NSPS Subpart Dc	NESHAP Subpart JJJJJJ
07	Boiler	York Shipley SPWV-40-2	90-17943	1.34 MMBtu/hr	1988	Feb 1990	N/A	Unlimited (S < 0.9% wt.)	No	Existing Oil Fired

[1] The Permittee must meet applicable NESHAP subpart JJJJJJ work practices (tune-ups), notification, and reporting requirements in Section 5 of the permit for boilers that operate as **Oil Fired** boilers or for dual fired boilers that switch to fuel oil use and become subject to the Subpart JJJJJJ in the oil firing subcategory as defined in 40 CFR 63.11237. Dual Fired Boilers listed as **Gas Fired** boilers in Table 2 must keep records on the amount of fuel oil used in accordance with II.B of Section 4 of the permit.

[2] MMcf – million cubic feet of natural gas (approximately equivalent to 1020 MMBtu for Natural Gas, 2500 MMBtu for Propane, 3200 MMBtu for Butane)

[3] CF – Capacity Factor = the ratio of the actual heat input to a boiler to the potential amount if operated at the maximum capacity over an equivalent period of time (12 consecutive months or 8760 hours for annual limit).

For example: If boiler 716-07 fired 50,000 gallons of fuel oil in 12 months. $CF_{\text{Fuel Oil}} = \frac{50{,}000\ gallons\ x\ 0.137\ MMBtu\ per\ gallon\ of\ fuel\ oil}{1.34 MMBtu/hr\ x\ 8760\ hours} = \frac{6850\ MMBtu}{11{,}738\ MMBtu} = 0.58$

Proposed Permit

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 storage tanks 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 each	Diesel
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. *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.*	-	-
Lab equipment used exclusively for chemical and physical analyses.	-	-
Trivial activities as provided in PCC 17.04.340.A.237 a through xx.	-	-

Proposed Permit

ATTACHMENT 4

EMISSIONS DISCHARGE OPACITY LIMITING STANDARDS

Table 17.16.040: EMISSIONS-DISCHARGE OPACITY LIMITING STANDARDS

Type of Source	Instantaneous Opacity Measurements			Maximum Allowable Average Opacity, %
	Required No. (For a Set)	Excluded No. (Highest Values)	No. to Use For Averaging	
Asbestos-Containing Operation[1]	25	0	25	0
Cold Diesel Engines[2]	25	0	25	60
Loaded Diesel Engines[3]	26	1	25	60
Incinerators	27	2	25	20
Portland Cement Plants[4]	25	0	25	20
Other Sources[5]	25	0	25	20

[1] An asbestos mill, manufacturing or fabrication operation which uses asbestos as a raw material, or spraying operation which sprays materials containing more than 1% asbestos by weight.

[2] Applicable to the first 10 consecutive minutes after starting up a diesel engine.

[3] Applicable to a diesel engine being accelerated under load.

[4] Applicable to kiln, clinker cooler, and other process equipment.

[5] Any source not otherwise specifically covered within this table, unless otherwise specifically covered in this chapter.

Proposed Perm