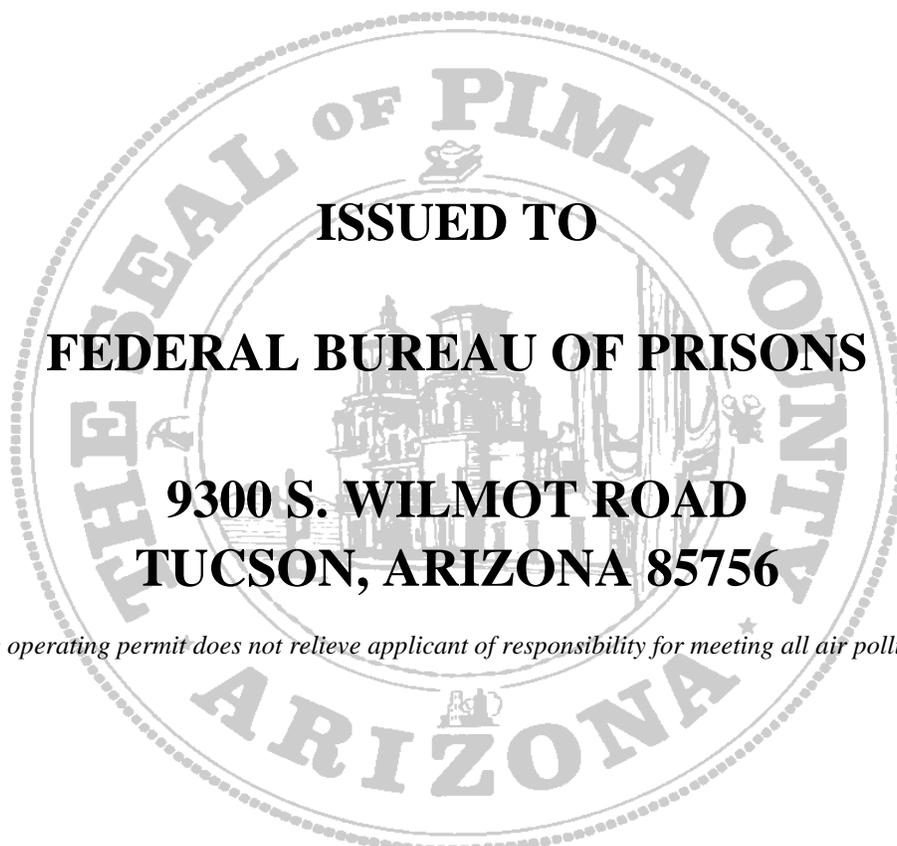


PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

33 N. Stone Avenue, Suite 700 • Tucson, Arizona 85701 • Phone: (520) 243-7400

AIR QUALITY OPERATING PERMIT

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



ISSUED TO
FEDERAL BUREAU OF PRISONS
9300 S. WILMOT ROAD
TUCSON, ARIZONA 85756

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

THIS PERMIT ISSUED SUBJECT TO THE SPECIFIC CONDITIONS IDENTIFIED IN THIS PERMIT.

PDEQ PERMIT NUMBER 3105

PERMIT CLASS III

PERMIT ISSUED MARCH 18, 2011

EXPIRES MARCH 17, 2016

REVISED September 3, 2015

A handwritten signature in black ink, appearing to read "Rupesh Patel".

SIGNATURE

Rupesh Patel, Air Permit Manager, PDEQ

TITLE

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PERMIT SUMMARY

Federal Bureau of Prisons operates a correctional complex located at 9300 South Wilmot Road, Tucson, Arizona 85756. The complex operates natural gas fired boilers and diesel fired emergency generators. The boilers are used to supply steam and hot water and the generators for backup electrical power in the case of an emergency or power outage.

Emissions result from the burning of fuel in the boilers and generators. The primary air pollutants emitted from the source are PM₁₀, NO_x, SO_x, CO and VOCs and the most significant of these are the nitrogen oxides.

This operating permit is a renewal of the 5-year permit. The source remains as a synthetic minor for NO_x, SO_x and CO. It is a true minor for PM₁₀, VOCs and HAPs.

The following emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of this permit.

Pollutant	Potential Emissions (Tons per Year)
Nitrogen Oxides (NO _x)	90.0
Carbon Monoxide (CO)	26.7
Sulfur Oxides (SO _x)	26.0
Particulate Matter (as PM ₁₀)	3.2
Volatile Organic Compounds (VOC)	3.1
Hazardous Air Pollutants (HAPs – total)	0.2

Potential combustion emissions are calculated using EPA AP-42 emission factors. The source will limit the potential emissions of these criteria pollutants less than major source thresholds by accepting a *Synthetic Minor Limitation* of operating hours for the emergency generators.

All requirements of this permit that are Federally Enforceable or Material Permit Conditions are specifically indicated as such.

SPECIFIC CONDITIONS

I. APPLICABILITY

The facility covered under this permit is a Class III synthetic minor source operating emergency generators and commercial/institutional boilers. The equipment operated at the source is subject to regulations of the Pima County Code, Title 17.

II. OPERATIONAL LIMITATION FOR GENERATORS

[PCC 17.12.190.B]

- A. The Permittee shall not operate the generators for more than the number of hours per year allowed in Attachment 2 of this permit. The total hours per year of operation shall be calculated as a rolling twelve (12) month total of all the generators.
- B. For each generator identified as having an operational limitation in Attachment 2 of this permit, the Permittee shall record the monthly operating hours at the close of each month and recalculate a combined rolling twelve (12) month total of all the generators. Recording and recalculation of operating hours shall be completed within 5 business days of the close of each month. All records shall be maintained for five years.

III. OPACITY STANDARD

[PCC 17.12.185.A.2]

A. Conditions for Generators

1. The Permittee shall not cause, allow, or permit smoke to be emitted into the atmosphere from any generator for any period greater than ten consecutive seconds that exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [PCC 17.16.340.E]
2. The Permittee shall not cause or permit the effluent from any generator to have an average optical density equal to or greater than 60 percent when a cold diesel engine is started or when a diesel engine is accelerated under load as measured in accordance with EPA Method 9, Appendix A in 40 CFR 60. [PCC 17.16.040]
3. The Permittee shall conduct a visible emissions check on the exhaust stack of each generator at least quarterly while the generator is operating. For the purposes of this permit, a visible emissions 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). All records shall be maintained for five years.
4. When required by the Control Officer, the Permittee shall perform visible emissions observations in accordance with EPA Method 9, Appendix A in 40 CFR 60, on the generators to demonstrate compliance with the opacity standard. [PCC 17.16.040 & PCC 17.20.010]

B. Conditions for Boilers

1. The Permittee shall not cause, allow or permit the effluent from any boiler to have an average optical density equal to or greater than 20 percent opacity. [PCC 17.16.040]

2. The Permittee shall conduct a visible emissions check on the exhaust stack of each boiler at least quarterly while the boiler is operating. For the purposes of this permit, a visible emissions check is verification that abnormal emissions are not present at the boiler 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). All records shall be maintained for five years.
3. When required by the Control Officer, the Permittee shall perform visible emissions observations in accordance with EPA Method 9, Appendix A in 40 CFR 60, on the boiler to demonstrate compliance with the opacity standard. [PCC 17.16.040 & PCC 17.20.010]

IV. FUEL LIMITATION

[PCC 17.12.185.A.2]

A. Conditions for Generators

1. The Permittee shall burn only the specified fuels allowed for each generator in Attachment 2 of this Permit.
2. In order to demonstrate compliance with the fuel limitation required in IV.A of the Specific Conditions, the Permittee shall maintain records of fuel supplier specifications which verify the fuel and sulfur content of the fuel, as delivered. All records shall be maintained for five years.

B. Conditions for Boilers

1. The Permittee shall burn only the specified fuel allowed the boiler in Attachment 2 of this Permit. [PCC 17.12.185.A]
2. In order to demonstrate compliance with the fuel limitation required in IV.A of the Specific Conditions, the Permittee shall maintain records of fuel supplier specifications which verify the fuel and sulfur content of the fuel, as delivered. All records shall be maintained for five years.

V. FACILITY CHANGES

- A. Should the Permittee desire to change the facility or operations in any way (including, but not limited to, addition of new equipment, modification of current equipment or usage of fuels not specified within this Permit,) the Permittee will first submit the proper notification and follow the required permit revision procedure pursuant PCC 17.12.240, PCC 17.12.255, and PCC 17.12.260.

ADDITIONAL PERMIT REQUIREMENTS

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 pursuant to PCC 17.12.040.B. To report excess emissions call **520-243-7400** or fax to **520-243-7370**.
 2. Detailed written notification by submission of an excess emissions report within 72 hours of the notification in I.B.1 above. **Send to PDEQ 33 N. Stone Ave, Ste 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.8 & 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.

ATTACHMENT 1
APPLICABLE REGULATIONS

Requirements Specifically Identified As Applicable

Pima County Code (PCC) Title 17, Chapters:

- 17.16.010 Local Rules and Standards; Applicability of more than one Standard
- 17.16.040 Standards and Applicability (Includes NESHAP)
- 17.16.050 Visibility Limiting Standard
- 17.16.340 Standards of Performance for Stationary Rotating Machinery
- 17.16.165 Standards of Performance for Fossil-Fuel Fired Industrial and Commercial Equipment

Requirements Specifically Identified As Non-Applicable

- 40 CFR Part 60 - Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.
- 40 CFR 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- 40 CFR 60 Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
- 40 CFR Part 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.



ATTACHMENT 2
EQUIPMENT LIST

Type of Equipment	Manufacturer	Model	Serial # or ID #	Maximum Rated Capacity	Operational Hour Limitation	Date of Manufacturer	Date of Installation	Fuel	
Dual Fired Boiler	UBW Boilers	MCH-28-175	U030004	7	MMBtu/hr (Btu x 10 ⁶)	8760 hrs/yr (Unlimited)	01-2004	01-28-2005	Natural Gas
			U030005	7					
			U030006	7					
Boiler	Parker	10 HP	60270	0.354		01-2011	03-08-2011		
Boiler	Parker	25 HP	60536	0.863		01-2011	10-18-2011		
Boiler	UBW Boilers	MCS-11-10-150	U030008	1.02		01-2004	01-28-2005		
Generator	Caterpillar	3516-B	7RN01952	1669 (Each)	HP	1541 hrs/yr (Combined Operational Hour Limitation)	01-2004	01-28-2005	Diesel
			7NR01951						
Fire Pump	Detriot Diesel/ Allision	DDFP04AT	4A254151	185		05-1981	10-26-1998		
Generator	Cummins	750DFHA	I960619580	750		09-1996	7-23-2015		

¹ Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

² Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE).

(PDEQ considers this facility as an 'institutional establishment' and as a result the HAPs standards for RICE engines are not applicable.)

³ Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.