

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR PROGRAM

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

AIR QUALITY PERMIT

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

**DAVIS-MONTHAN AFB
SIC CODE, MAJOR GROUP '80'
HEALTH SERVICES
3775 S. 5TH ST.
TUCSON, AZ 85707**

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

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

PERMIT NUMBER **3005**

PERMIT CLASS **III**

ISSUED: **April 17, 2017**

EXPIRES: **April 16, 2022**



SIGNATURE

Rupesh Patel, Air Permit Manager, PDEO

TITLE

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PERMIT SUMMARY***Location Information***

This air permit is issued to an existing source operated by Davis-Monthan Air Force Base (DMAFB), the Permittee. The administrative offices are located at 3755 S. 5th Street, Tucson, AZ. The facility is located on parcels identified by Pima County Assessor's Parcel #'s: 132-01-001A, 132-02-010, 132-03-010, 132-24-008E, 132-26-010, 132-27-010, 136-27-(010-030), 140-01-(10-20, 1090, & 1100), 141-02-(040-070).

Source Description

All pollutant-emitting activities (operations) at DMAFB fall under the following functionally distinct primary SIC Code groupings which are covered under the following distinct Class II/III air permits:

- Permit # 3000: DMAFB, Major Group – 42 – Special Warehousing and Storage
- Permit # 3001: DMAFB, Major Group – 45 – Transportation by Air
- Permit # 3002: DMAFB, Major Group – 49 – Electric, Gas, and Sanitary Services
- Permit # 3004: DMAFB, Major Group – 65 – Real Estate
- Permit # 3005: DMAFB, Major Group – 80 – Health Services
- Permit # 3006: DMAFB, Major Group – 97 – National Security and International Affairs

The activities and operations covered by this permit are those sources at Davis-Monthan AFB located at the AFB Hospital which fall under the following industrial classification:

- SIC Code: Major Group 80 – Health Services (NAICS 622110)

The activities and operations at the facility includes: boilers, emergency generators, and ancillary operations located at the hospital.

Air Permit Information

This is the first renewal of the existing 5-year air quality permit. This permit incorporates voluntarily proposed emission limitations to keep HAP(s) below major source thresholds.

The following table summarizes the potential to emit of the source with limitations. These emission values are taken from the information contained in the renewal application and from standard emission factors in AP-42 Chapters 1 & 3. The emission values are for information purposes only and are not intended to be enforceable limits.

Controlled Permit-Wide Potential Emissions of Pollutants ¹ (tons/yr)										
Conventional or Criteria Air Pollutant								NSPS	HAPs	
PM_{2.5}	PM₁₀	PM	NO_x	VOC	CO	SO₂	Lead	N/A	Total	Single
0.72	0.72	0.72	15.82	0.70	4.59	0.32	Negligible	-	< 1.5	< 1.5

¹ Emergency generator engine PTE is calculated on operation as an emergency generator (500 hour/year). Boiler and heater PTE is calculated on unlimited operation when firing natural gas.

SPECIFIC CONDITIONS

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

SECTION 1: GENERAL APPLICABILITY

1. *Statutory Authority*

Emissions from this facility, specifically the emissions from the equipment described in Attachment 2 of this permit, fall under primary SIC Code, Major Grouping ‘80’, and are subject to enforceable limitations as provided in the Specific Conditions contained in this permit. This air permit is issued pursuant to (ARS) §49-480 and authorizes the construction and operation of the equipment enumerated in the “Equipment List” in Attachment 2. This authorization is based on the regulations in effect on the date of issuance of this permit, and a finding that the allowable emissions from this permit, and all other installations that fall under functionally distinct primary SIC code groupings, more fully described in the applications for permits under SIC Codes, Major Groups, 42, 45, 49, 65, 80, and 97, do not constitute a "major source" within the meaning of PCC 17.04.340.A.128. Notwithstanding the above findings, the issuance of this air quality permit shall not relieve the Permittee from compliance with all local, county, state and federal laws, statutes, and codes.

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

2. *Permit Classification*

Class III; Synthetic Minor Source; Stationary: The permitted facility sources constitute a stationary synthetic minor source of HAP based on voluntary limitations and operating restrictions contained in this permit and when considering emissions from sources aggregated under the same primary SIC Code grouping (Major Group 80 – Health Services).

3. *Permitted Facility Sources*

The Specific Conditions contained in this permit apply to the equipment listed in Attachment 2 of this permit and fall into the following source categories. Section 5 of this permit contains conditions relating the specific applicability to the permitted facility sources.

- a. Miscellaneous chemical/materials use
- b. Boilers, heaters, and other fuel fired equipment
- c. Stationary rotating machinery

4. *Permit Sections*

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

- Section 1 – General Applicability (This Section)
- Section 2 – Permit-Wide Operations
- Section 3 – Fossil Fuel Fired Industrial Commercial Equipment
- Section 4 – Stationary Rotating Machinery
- Section 5 – Specific Applicability Provisions

5. *Applicability of more than one standard*

If more than one emission limit or emission standard in this permit is applicable to the same source, the more stringent standard or emission limit shall apply.

[PCC 17.16.010.B]

[Locally Enforceable Condition]

SECTION 2: PERMIT-WIDE OPERATIONS

In accordance with condition 39.a. the provisions in this Section apply to permit-wide operations and all sources of air contaminants. All provisions in this Section are locally enforceable unless otherwise noted.

[PCC 17.16.010.B]

Emission Limitations and Standards

[PCC 17.12.185.A.2]

6. *Voluntary Emission Limitations*

[PCC 17.12.190.B & PCC 17.12.350.A.3.a]

The Permittee shall comply with the operating limitations in Sections 3 through 4 of this permit and the following voluntary emission limitations in order to avoid federal or other applicable requirements:

[Federally Enforceable and Material Permit Conditions]

- a. The Permittee shall not allow the emission rate of combined Hazardous Air Pollutants (HAPs) from sources and operations covered under this permit to exceed 1.5 tons per year as measured on a 12 month rolling total basis.
- b. The Permittee shall not allow the base-wide emission rate of combined Hazardous Air Pollutants (HAPs) to exceed 22.5 tons per year as measured on a 12 month rolling total basis.
- c. The Permittee shall not allow the base-wide emission rate of any single Hazardous Air Pollutant (HAP) to exceed 9 tons per year as measured on a 12 month rolling total basis.

7. *General Control Standards*

- a. The Permittee shall not cause or permit the planning, construction, installation, erection, modification, use or operation of an emission source which will cause or contribute to a violation of a performance standard in Title 17 of the Pima County Code. [PCC 17.12.020 & PCC 17.16.020.A]
- b. The Permittee is prohibited from firing high sulfur oil in any stationary or portable source without submitting a revision, as provided in condition 25 of this Section, demonstrating to the satisfaction of the Control Officer, both that sufficient quantities of low sulfur oil are not available for use by the Permittee, and that the Permittee has adequate facilities and contingency plans to ensure that the sulfur dioxide ambient air quality standards will not be violated. For purposes of this paragraph “high sulfur oil” means oil containing 0.90 percent or more by weight of sulfur. Notwithstanding the prohibition to use high sulfur oil, the Specific Conditions contained in this permit may prescribe lower fuel sulfur content limits for specific stationary or portable sources. [PCC 17.12.185.A.2]

[Material Permit Condition]

- c. Where a stack, vent or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent or other outlet by the owner or operator thereof to a degree that will adequately reduce or eliminate the discharge of air pollution to adjoining property. [PCC 17.16.020.B]

8. *Materials Handling Standards*

- a. The Permittee shall not transport or store VOC’s without taking necessary and feasible measures to control evaporation, leakage, or other discharge into the atmosphere. [PCC 17.16.400.A]
- b. Petroleum liquid storage tanks shall be equipped with a submerged filling device or acceptable equivalent for the control of hydrocarbon emissions. [PCC 17.16.230.C]

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

9. *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. Emissions from malodorous matter shall not cross a property line without minimizing the emissions by applying modern practices. Malodorous matter shall include but not be limited to solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure. [PCC 17.16.430.F & PCC 17.16.030]

10. *Opacity Limit* [PCC 17.16.040, PCC 17.16.050.B, & PCC 17.16.130.B.1]

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

[Federally Enforceable When Opacity Is Above 40%]

- a. Opacities (optical densities), as measured in accordance with Method 9, of an effluent shall be measured by a certified visible emissions evaluator with his natural eyes, approximately following the procedures which were used during his certification, or by an approved and precisely calibrated in-stack monitoring instrument. [PCC 17.16.040.A.1]
- b. A violation of an opacity standard shall be determined by measuring and recording a set of consecutive, instantaneous opacities, and calculating the arithmetic average of the measurements within the set unless otherwise noted in this permit. The measurements shall be made at approximately fifteen-second intervals for a period of at least six minutes, and the number of required measurements shall be as specified in Attachment 4. Sets need not be consecutive in time, and in no case shall two sets overlap. If the average opacity of the set of instantaneous measurements exceeds the maximum allowed by any rule, this shall constitute a violation. [PCC 17.16.040.A.2]
- c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited. [PCC 17.16.040.A.3]
- d. When the presence of uncombined water is the only reason for failure of a source to otherwise meet the requirements as specified in conditions 10 and 11, conditions 10 and 11 shall not apply. [PCC 17.16.040.B]

11. *Visibility Limiting Standard* [PCC 17.16.050]

- a. The Permittee shall not cause, suffer, allow or permit operations or activities likely to result in excessive amounts of airborne dust without taking reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne.

- b. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne, without taking reasonably necessary and feasible precautions to control generation of airborne particulate matter. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.
 - i. Condition 11.b shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.
 - ii. Condition 11.b shall not apply to the generation of airborne particulate matter from undisturbed land.

12. *Disposition of Portable Sources*

For the purpose of this subsection, “*portable source*” means any building, structure, facility, or installation that emits or may emit any air pollutant and is capable of being operated at more than one location. “*Major source threshold*” means the lowest applicable emission rate for a pollutant that would cause the source to be major at the particular time and location under PCC 17.04.340.128. [PCC 17.04.340.A. (127, 128, 129, 174)]

- a. Portable sources, including transportable non-road engines, that do not require a permit pursuant to Title 17 of the PCC, that have a potential to emit (PTE) in excess of the levels deemed by the Control Officer to be insignificant activities due to their size or production rate, may be required to demonstrate when the portable equipment was moved or relocated from a storage area to a location on the property to establish that the source is not subject to regulation as a stationary source. For the purpose of this condition, portable sources that can be moved by hand or have a combined potential to emit, without controls, less than 10% of the major source threshold shall be deemed to be insignificant activities. [PCC 17.04.340.A.(114.j & 129), PCC 17.12.140.B.3.a, & PCC 17.12.240.C.2]
- b. The Permittee shall not allow the combined potential to emit (PTE) of the sources covered by this permit and co-located portable sources subject to condition 12.b.i as stated below, to exceed the major source threshold (12 months), without first applying for a permit revision as provided in condition 24. [PCC 17.12.260.B.7]
 - i. The Permittee shall consider the emission rate of co-located portable sources that require a permit, pursuant to Title 17 of the PCC, in the emission limitations established by this permit, if the portable source is located onsite and meets either of the following conditions: [PCC 17.04.340.A (41), PCC 17.12.100, PCC 17.12.300.C & E]
 - (a) The portable source is considered a pollutant emitting activity belonging to the same industrial grouping as sources covered by this permit, is located on one or more contiguous or adjacent properties, and is under the control of the same person, or under the common control of the same person. For the purpose of this provision, pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same major group which has the same two-digit code, as described in the Standard Industrial Classification (SIC) Manual, 1972, as amended by the 1987 supplement; or
 - (b) The portable source is located on one or more contiguous or adjacent properties owned and operated by the Permittee, and while classified under a different major group which has a different two digit SIC code, may be considered an aggregated support facility belonging to the same industrial grouping and under common control through a support/dependency relationship, wherein the portable source supports, or is supported by the Permittee with more than 50% of the raw materials or product.

13. *Asbestos Requirements for Demolition and Renovation Activities*

The Permittee shall not allow or commence demolition or renovation of any NESHAP facility, as defined in 40 CFR Part 61, Subpart M, National Emission Standards for Hazardous Air Pollutants – Asbestos, without first obtaining an activity permit from the Control Officer. Should this stationary source, pursuant to 40 CFR Part 61, Subpart M, become subject to asbestos regulations when conducting any renovation or demolition at this premises, then the Permittee or operator shall submit proper notification as described in 40 CFR Part 61, Subpart M and shall comply with all other applicable requirements of Subpart M. The Permittee shall keep a record of all relevant paperwork on file. [PCC 17.12.475 & 40 CFR 61, Subpart M]

Monitoring Requirements

[PCC 17.12.185.A.3]

14. *Visible Emissions (VE)*

If at any time, or while conducting an opacity check required by the Specific Conditions in this permit, the Permittee sees any plume or effluent from a facility source, that on an instantaneous basis, appears to exceed the opacity limit, or if visible emissions including fugitive dust, diffuse beyond the property boundary line, the Permittee shall investigate the source of the emissions and if required take corrective action. If the plume persists, or the activity or operation which is causing or contributing to the emissions cannot be corrected or halted, the Permittee shall make a visual determination of the opacity in accordance with condition 10 when practicable. If the VE determination exceeds the applicable opacity limit, or if visible emissions, including fugitive dust, diffuse beyond the property boundary line, the Permittee shall report this as an excess emission in accordance condition 22. [PCC 17.16.040, PCC 17.16.50.B]

15. *Portable Sources*

- a. The Permittee shall keep complete records of the materials used as fuel in any portable sources that are not fueled by natural gas or propane. [PCC 17.16.010.C]
- b. The Permittee shall keep complete records, as needed, to demonstrate that portable sources that do not require a permit, as provided in condition 12.a, are not subject to regulation as a stationary source. The Permittee may use the sample portable source relocation log in Attachment 5 of this permit to demonstrate the portable source's status.
- c. The Permittee shall keep complete records, as needed, demonstrating that the combined emissions rate of co-located portable sources that require a permit as provided in condition 12.b and sources covered by this permit do not exceed the major source threshold or the voluntary HAP emission limitations in condition 6.

16. *Miscellaneous Chemical/Materials Use*

For the purpose of these conditions a HAP-containing chemical/material shall be any material that contains any individual HAP that is an Occupational Safety and Health Administration (OSHA) defined carcinogen as specified in 29 CFR 1910.1200(d)(4) at a concentration greater than 0.1 percent by mass, or greater than 1.0 percent by mass for any other individual HAP compound. For the purpose of determining whether materials the Permittee uses contain HAP compounds, the Permittee may rely on formulation data provided by the manufacturer or supplier, such as the material safety data sheet (MSDS), as long as it represents each HAP compound in the material that is present at 0.1 percent by mass or more for OSHA defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other target HAP compounds. If the HAP content for a material is specified as a range of concentrations in the MSDS, the highest concentration specified in the range shall be used to determine the HAP content of that material.

- a. In accordance with condition 6, the Permittee shall maintain an Air Program Information Management System (APIMS) to ensure tracking and reporting of the types and quantities of HAP-containing materials issued or used in operations covered by this permit (SIC Code, Major Group 80). The HAP containing materials shall include but not be limited to surface coatings and diluents, wash solvents, degreasing agents, de-icing agents, light lubricants, adhesives, sealants, and other-non-janitorial soaps and cleaners.
- b. The Permittee shall use APIMS to prepare a monthly issues report (MIR) that inventories and totals the mass of HAP emitted from HAP-containing materials issued or used in operations covered by this permit. The following shall be assumed required in generating the MIR report:
 - i. The MIR shall contain the monthly use or issuance of each material including the unit basis used in determining the monthly summaries of the combined mass of HAPs emitted and the monthly summaries of individual HAP species emitted.
 - ii. The Permittee may choose to track HAP emissions on an “issues” basis or on an “as used” basis. The MIR shall clearly state if the log is an “as used” or an “issue” log, and identify the material with the associated operation, whenever possible, as either surface coating operations, solvent degreasing operations, or miscellaneous chemical/materials, as applicable. If the associated operation is otherwise unknown, the HAP emissions shall be included in the miscellaneous chemical/materials operation log.
 - iii. In operations where the Permittee chooses to track HAP emissions on an “issues” basis rather than on an “as used” basis, an “issue” shall be deemed to have occurred when possession of a material which has been purchased for use at the facility is transferred to the requestor. The Permittee shall not be allowed to change the method of logging once established. That is, an “issue log” shall not be allowed to be changed to an “as used” type of log, or vice versa, once the log has been implemented for a particular operation.
 - iv. All products shall be assumed to be used during the calendar month they are issued or used for enclosed surface coating operations, solvent degreasing operations, and miscellaneous chemical/materials issues (including architectural coatings).
 - v. All products issued or used shall be assumed to emit all of its volatile HAP when used.
 - vi. Spray applied architectural coatings issued or used shall be assumed to emit all of their non-volatile HAP.
 - vii. Every material or product that is used or issued shall be analyzed for its HAP content and recorded in a file that is readily available for expeditious review by the Control Officer. Each record shall be indexed to the materials listed in the MIR and contain the following information:
 - (a) The HAP content (in weight percent) for each individual HAP specie; and
 - (b) The total combined HAPs content (in weight percent); and
 - (c) The unit basis, weight or volume, and density or specific gravity (as applicable).

17. *Permit-Wide Standards*

Except as provided in conditions 14, 15, 16, and 27 of this Section or as otherwise contained in the Specific Conditions of this permit, additional monitoring for compliance with the permit-wide standards in conditions 6 through 13 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 permit-wide standards has been committed.

Recordkeeping Requirements

[PCC 17.12.185.A.4]

18. *Monitoring Records*

[PCC 17.12.184.A.4.a]

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

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

19. *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.

20. *Recordkeeping for Compliance Determination*

[A.R.S.§49-485, PCC 17.12.080, & PCC 17.24.020.A]

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

Reporting Requirements

[PCC 17.12.185.A.5]

21. *Special Annual Reporting*

[PCC 17.24.050]

The Permittee shall submit an annual report to the Control Officer due on April 30th of each year, covering the period April 1st of the previous year through March 31st of the current year, documenting compliance with the voluntary HAP limitations in condition 6. The report shall contain the following:

- a. For each month, the Permittee shall calculate and record the 12-consecutive month rolling total amount of the combined mass of HAPs emitted by sources and operations covered under this permit (SIC Code, Major Group 80) within 45 calendar days after the end of the month. The mass of combined HAPs emitted shall be calculated and summed using the monitoring records in conditions 16 and 36 in this permit and the appropriate emission factors and methods in the approved potential to emit documents provided in the permit application.
- b. For each month, the Permittee shall report the 12-consecutive month rolling totals of the mass of combined HAPs emitted from emission sources and operations covered under all permits issued to the Permittee within 45 calendar days after the end of the month. The report shall also include emissions from any portable sources that require a permit and are planned to be located at a single site in excess of 12 months as provided in conditions 12.b and 15.c.

- c. For each month, the Permittee shall report the 12-consecutive month rolling totals of the mass of the 10 highest single HAP species emitted from emission sources and operations for all permits issued to the Permittee within 45 calendar days after the end of the month. The report shall also include emissions from any portable sources that require a permit and are planned to be located at a single site in excess of 12 months as provided in conditions 12.b and 15.c.

22. *Excess Emissions Reporting:* [PCC 17.12.040]

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit in accordance with condition 2 of the General Conditions (pg. 18).

23. *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.

24. *Certification of Truth Accuracy and Completeness* [PCC 17.12.165.H]

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

Facility Changes

25. *Permit Revision Application* [PCC 17.12.235, PCC 17.12.240.C.3, PCC 17.12.255, PCC 17.12.260]

Before installing additional emission sources, modifying existing emission sources, switching fuels, or changing the method of operation at the facility such that the changes increase actual emissions more than 10% of the major source threshold, the Permittee shall, if applicable, apply for the appropriate revision in accordance with PCC 17.12.235, PCC 17.12.255, or PCC 17.12.260.

26. *Notification* [PCC 17.12.240.C]

For permit 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

27. *Facility Change Log* [PCC17.12.240.B]

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

Testing Requirements

[PCC 17.12.045, PCC 17.12.050 & PCC 17.20.010]

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

a. *Opacity*

When required, EPA Test Method 9 shall be used to monitor compliance with the opacity standards identified in this permit. [PCC 17.12.045.B]

b. *Fuel Sulfur Limitations*

Documentation, such as invoices or statements from the fuel supplier, showing the fuels delivered and verifying the fuel sulfur content is below applicable standards, shall be an acceptable means to demonstrate compliance with fuel limitations identified in this permit. If otherwise required or when requested by the Control Officer, the fuel sulfur content of fuels shall be determined using ASTM D129, D1266, D1552, D2622, D4294, D5453 or an equivalent for liquid fuels, and ASTM D1072, D3246, D4084, D4468, D4810, D6228, D6667, Gas Processors Association Standard 2377, or an equivalent for gaseous fuels.

c. *HAP Determination*

The HAP content (percent by weight) of all materials issued or used or the HAP emitted from equipment and operations shall be determined through one of the following methods:

- i. A standard methodology published by EPA, ASTM, or industry approved emission factors, as applicable.
- ii. Use of Material Safety Data Sheets (MSDS). If the HAP content for a material is specified as a range of concentrations in the MSDS, the highest concentration specified in the range shall be used to determine the HAP content of the material.
- iii. A manufacturer's certification of HAP content.
- iv. The methods set forth in 40 CFR Part 60, Appendix A.
- v. If otherwise unknown or unable to determine the HAP content or coating density for surface coatings or solvents that are not commonly used, the Permittee may use a "default" surface coating HAP content of 7 lbs. of HAP/gallon or 70% HAP (by weight); and a solvent HAP content of 10 lbs. of HAP/gallon or 100% HAP (by weight) added to the highest single HAP specie emitted from emission sources and operations as provided in condition 21.c.

d. *Alternative Test Plan*

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

e. *Test Protocols and Guidelines*

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

f. *Enforcement*

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

SECTION 3: FOSSIL FUEL FIRED INDUSTRIAL AND COMMERCIAL EQUIPMENT

In accordance with condition 39.b, the provisions in this Section are applicable to boilers, heaters, and other fuel fired equipment identified on the equipment list in Table 1 of Attachment 2. In addition to the following provisions, the general provisions of 40 CFR Part 60 and 63, Subpart A apply to affected steam generating units (boilers) as applicable. All provisions of this section are locally enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.12.185.A.2]

29. *Operating Limitation*

The Permittee shall burn only the following fuels in each boiler, heater, or other fuel fired equipment listed in Table 6 of Attachment 2, subject to the following limitations:

[PCC 17.12.350.A.3.a]

[Material Permit Condition]

a. *Natural Gas*

There are no operating hours or fuel limitations for equipment when burning natural gas. For the purpose of this provision, *Natural gas* means: A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835; or a mixture of hydrocarbons that maintains a gaseous state at ISO conditions (*i.e.*, a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals), additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (950 and 1,150 Btu per dry standard cubic foot); or propane or propane-derived synthetic natural gas. *Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure C₃H₈.

[40 CFR 63.11237]

30. *Opacity Limit*

The opacity of all plumes and effluents from equipment listed in Table 6 of Attachment 2 shall not exceed 20% as determined by EPA Reference Method 9, Appendix A, 40 CFR Part 60.

[PCC 17.16.040, PCC 17.16.130.B]

Compliance Determination

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

31. *Operating Limitation*

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

32. *Opacity Limit*

A demonstration to show compliance with the emission limitation for opacity in condition 42 shall not be required since the percent of opacity of visible emissions from the boilers while combusting natural gas fuel is inherently low. The Permittee shall operate and maintain the boilers at all times - including periods of startup, shutdown, and malfunction - in a manner consistent with good air pollution control practices and consistent with manufacturer's guidelines.

SECTION 4: STATIONARY ROTATING MACHINERY

In accordance with condition 39.c, the provisions in this Section apply to the stationary rotating machinery listed in Table 2 of Attachment 2. All provisions of this Section are locally enforceable unless otherwise noted.

Emission Limitations and Standards

[PCC 17.12.185.A.2]

33. *Operational Limitations*

- a. The Permittee shall not operate emergency ICE for more than the number of hours per year allowed in Table 2 of Attachment 2 in any 12-consecutive month period. There is no limit on hours of operation during true emergencies.

[PCC 17.12.350.A.3.a]

[Federally Enforceable & Material Permit Condition]

34. *Fuel Limitations*

The Permittee shall burn only the specified fuel(s) allowed for each unit in Table 2 of Attachment 2.

[PCC 17.16.340.F]

[Material Permit Condition]

35. *Opacity Limit*

Stationary Rotating Machinery shall comply with the permit-wide opacity limit in condition 10. In addition, the Permittee shall not cause or permit to be emitted into the atmosphere from any rotating stationary rotating machinery (generators) smoke for any period greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[PCC 17.16.040, 17.16.130 & PCC 17.16.340.E]

Compliance Determination

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

36. *Operational Limitation*

For each generator identified as having an hour limitation in Table 2 of Attachment 2, the Permittee shall record the monthly operating hours and recalculate a rolling twelve (12) month total within 30 calendar days of the end of the month.

37. *Fuel Limitation*

In order to demonstrate compliance with the fuel limitations required in condition 34, the Permittee shall maintain records of fuel supplier specifications which verify the sulfur content of the fuels, piped and/or as delivered.

38. *Opacity Limit*

The Permittee shall conduct a visible emissions check on the exhaust stack of stationary rotating machinery at least monthly if run during the month. For the purposes of this 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). No monthly visible emissions checks are required for stationary rotating machinery that only fire natural gas or LPG.

SECTION 5: SPECIFIC APPLICABILITY PROVISIONS

39. *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. *Permit-Wide Operations*

Except as provided in condition 41, the provisions in Section 2 of this permit apply to permit-wide operations and to all sources of air contaminants at the facility, to include the following: Voluntary emission limitations, general control standards, materials handling standards, odor limiting standard, opacity limit, visibility limiting standard, disposition of portable sources, and asbestos requirements for renovation and demolition activities. In addition to the General Conditions contained in this permit, Section 2 contains specific monitoring, recordkeeping, reporting, facility change, and testing requirements that apply permit-wide and to all emission sources and operations covered by this permit.

[PCC 17.12.190.B, PCC 17.16.010., PCC 17.16.020 thru 050, PCC 17.16.400.A & C, & PCC 17.16.430.F]

[Federally and Locally Enforceable Conditions]

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

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

[PCC 17.16.165]

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

[PCC 17.16.165]

ii. Should the Permittee desire to fire fuels in a boiler or hot water heater covered by this permit that do not meet the fuel limitations in Section 3 of this permit, the Permittee shall submit a significant revision in accordance with condition 25.

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

c. *Stationary Rotating Machinery*

Section 4 of this permit applies to stationary rotating machinery that are not subject to the NSPS standards in 40 CFR Part 60, Subpart IIII or NESHAP standards in 40 CFR Part 63, Subpart ZZZZ.

[PCC 17.16.340 & PCC 17.12.350.A.3.a]

[Locally Enforceable & Material Permit Conditions]

i. Applicable emergency ICE in Table 2 are institutional emergency generators exempt from NESHAP Subpart ZZZZ provided they are not operated for more than 100 hours for maintenance and readiness testing. Operation during true emergencies is not limited.

[40 CFR 63.6640(f)]

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

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

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

[Locally Enforceable Conditions]

41. *Exempt Sources*

a. Agricultural Equipment

The Specific Conditions contained in this air quality permit shall not apply to agricultural equipment used in normal farm operations, unless their operation without a permit would result in a violation of the Act. [PCC 17.12.140.C.3]

GENERAL CONDITIONS

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

1. ***Compliance with Permit Conditions*** [PCC 17.12.185.A.7.a & b]
 - a. The Permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
 - b. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. ***Excess Emissions, Emergency Reporting*** [PCC 17.12.185.A.5 & PCC 17.12.040]

The Permittee shall report to the Control Officer any emissions in excess of the limits established by this permit. The report shall be in 2 parts as specified below:

 - a. Notification by telephone or facsimile within 24 hours of the time the Permittee first learned of the occurrence of excess emission that includes all available information from 17.12.040.B. The number to report excess emissions is **520-724-7400**. The facsimile number is **520-838-7432**.
 - b. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under 2.a above. **Send to PDEQ 33 N. Stone Avenue, Suite 700, Tucson, Arizona 85701.**

3. ***Property Rights*** [PCC 17.12.185.A.7.d]

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

4. ***Fee Payment*** [PCC 17.12.185.A.9 & PCC 17.12.520]

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

5. ***Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause*** [PCC 17.12.185.A.7.c]

The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to PCC 17.12.270. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. ***Duty to Provide Information*** [PCC 17.12.165.G & PCC 17.12.185.A.7.e]
 - a. The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records to the Control Officer along with a claim of confidentiality.
 - b. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

7. ***Severability Clause*** [PCC 17.12.185.A.6]

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

ATTACHMENT 1 – APPLICABLE REGULATIONS

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

Appendix A Test Methods

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

Article I – General Provisions

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

Article II – Individual Source Permits

- 17.12.165 Permit application processing procedures for Class II and Class III permits
- 17.12.185 Permit contents for Class II and Class III permits
- 17.12.190 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 VI – Individual Source Permits

- 17.12.520 Fees related to Class II and Class III permits

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

Article I – General Provisions

- 17.16.010 Local rules and standards; Applicability of more than one standard
- 17.16.020 Noncompliance with applicable standards
- 17.16.030 Odor limiting standards

Article II – Visible Emission Standards

- 17.16.040 Standards and applicability (includes NESHAP)
- 17.16.050 Visibility limiting standard

Article IV – New and Existing Stationary Source Performance Standards

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

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

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

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

- 17.24.020 Recordkeeping for compliance determination
- 17.24.050 Reporting as permit requirement

ATTACHMENT 2 – EQUIPMENT LIST

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

Miscellaneous chemical/materials use operations for SIC Major Group ‘80’ (Ref. Section 2, Condition 16)**Table 1 – Boilers & Heaters (Ref Permit Section 3)**

Equipment Number	EPN/ Description	MFR/Model Model	Serial Number/ Unique ID	Maximum Rated Capacity	Date of MFR	Date Installed	Allowable Fuels and Annual Limits		Applicability	
							Natural Gas	Fuel Oil	NSPS Subpart Dc	NESHAP Subpart JJJJJ
							(hrs)	(Gal, hrs, CF, % S)		
01	ECOM 401-01 Water Heater	Fulton Pulspak PHW 1400	14221-1	1.26 MMBtu/hr	2002	2002	8,760	N/A	No	N/A
02	ECOM 401-02 Water Heater	Fulton Pulspak PHW 1400	14221-2	1.26 MMBtu/hr	2002	2002	8,760	N/A	No	N/A

Table 2 – Stationary Rotating Machinery (Ref. Permit Section 4)

Equipment Number	Description	MFR	Model	Serial Number/ Unique ID	Maximum Rated Capacity	Run Hour Limitations	Fuels Used / Limitations	Date of MFR	Date Installed
03	Emergency Generator ICOM 401-01	Caterpillar	150ROZJ81	78202682	200 Hp	100 hours	Diesel	1994	1994
04	Emergency Generator ICOM 4342-01	John Deere Kohler	SR-4 3408B	RGB6076A200628	603 Hp	100 hours	Diesel	1988	1988

¹ Allowable hours of operation for emergency generators are limited to maintenance testing and readiness checks. There is no limit on hours of operations during true emergencies.

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.	-	-
Various Diesel or Fuel Oil Storage Tanks Generator Fuel Tanks Oil Water Separators Tanks Storing Low Vapor Pressure Liquids such as virgin oil, flush oil, hydraulic oil, anti-freeze, et. al.	≤ 40,000 gallons ea.	Diesel, Jet-A, JP-5, JP-8
Batch mixers.	≤ 5 cubic feet	-
Wet sand and gravel production facilities whose permanent in-plant roads are paved and cleaned to control dust. This does not include activities in emissions units which are used to crush or grind any nonmetallic minerals.	≤ 200 tons/hour	-
Hand-held or manually operated equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding, or turning of ceramic art work, precision parts, leather, metals, plastics, fiberboard, masonry, carbon, glass or wood.	-	-
Powder Coating Operations	-	-
Internal combustion (IC) engine-driven compressors, IC engine-driven electrical generator sets, and IC engine-driven water pumps used only for emergency replacement or standby service. <i>Note: Portable or temporary internal combustion engines (ICE) 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 ICE.</i>	-	-
Lab equipment used exclusively for chemical and physical analyses.	-	-
Trivial activities as provided in PCC 17.04.340.A.237 a through xx.	-	-
The following additional equipment operations or activities: External Combustion Units with a capacity < 1 MMBtu/hr that are exclusively fired by natural gas or LPG, provided that the aggregate capacity of such fuel burning equipment does not trigger a permit revision (i.e. the fuel burning equipment has a potential to emit less than 10% of the major source threshold or less than 10 tons per year for any conventional pollutant). ¹	≤ 1 MM BTU/hr ¹	Natural Gas

ATTACHMENT 4 – EMISSIONS DISCHARGE OPACITY LIMITING STANDARDS**PCC 17.16.040**

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

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

² Applicable to a diesel engine being accelerated under load.

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

ATTACHMENT 5 - SAMPLE PORTABLE SOURCE LOCATION LOG

Company Name: _____ Company Equipment ID. No: _____

Portable Source Description/Model: _____ Fuel Burning Equipment Yes _____ No _____

Fuel Fired (if applicable): _____ Model or Size * : _____

Date of Manufacture: _____

Site Location	Initial Date at Location	Date Moved to Storage Area
	Operating Hours:	Operating Hours:

* If applicable, please indicate the process rate in lbs/hr, hp, or MMBtu/hour