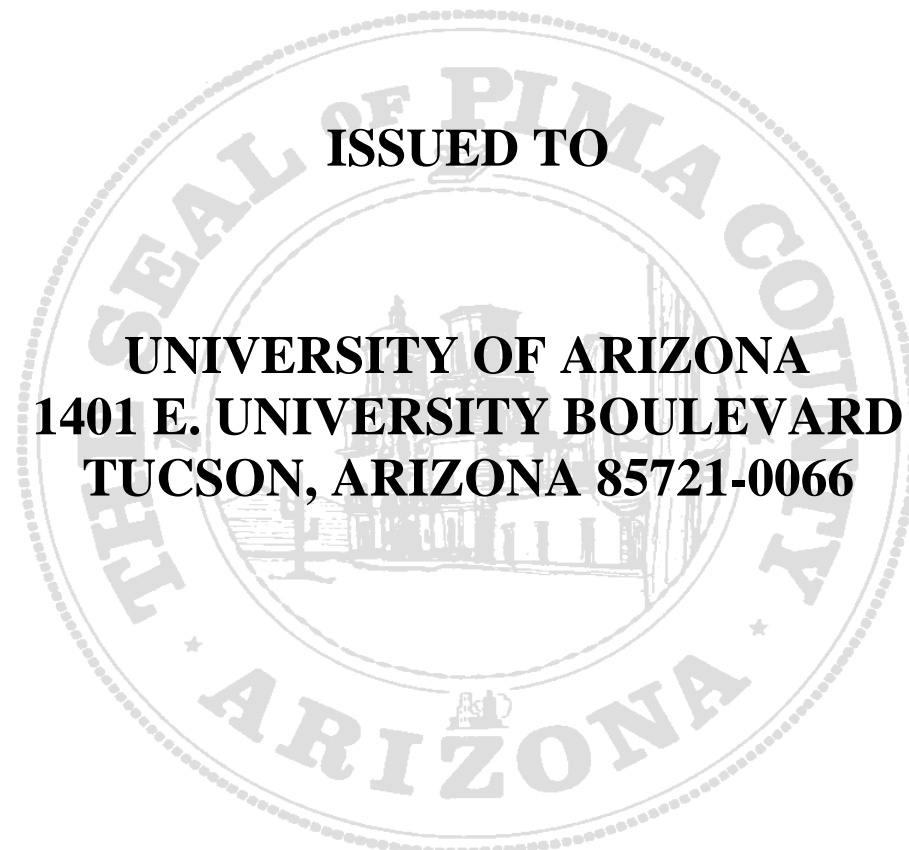


**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY**

**150 West Congress Street • Tucson, Arizona 85701 • Phone: (520) 740-3340**

**AIR QUALITY OPERATING PERMIT**

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



**ISSUED TO**

**UNIVERSITY OF ARIZONA  
1401 E. UNIVERSITY BOULEVARD  
TUCSON, ARIZONA 85721-0066**

THIS PERMIT ISSUED SUBJECT TO THE FOLLOWING: Conditions contained in PARTS "A", "B", "C", "D" and "E".

PDEQ PERMIT NUMBER 2371 PERMIT CLASS I EXPIRATION DATE NOVEMBER 12, 2006.

PERMIT REVISED THIS 29<sup>th</sup> DAY OF DECEMBER TWO THOUSAND AND SIX.

\_\_\_\_\_  
SIGNATURE

*Tina Gingras, Air Program Manager, PDEQ*  
TITLE

Permit Number 2371  
University of Arizona  
1401 E. University Blvd  
Tucson, Arizona 85721

## SUMMARY

The following table summarizes the potential to emit of the University of Arizona with the federally enforceable controls contained in the permit. These figures were taken from the information contained in the application dated November 21, 1997 (as supplemented and amended since that date) and from standard emission factors in the U.S. EPA's document entitled "Compilation of Air Pollutant Emission Factors" (AP-42, Volume I). These figures are for information purposes only, are used to establish baseline emissions for the source, and are not intended to be enforceable emission limits.

Potential-to-Emit (Tons per Year)			
Pollutant	Fugitives	Non-Fugitives	Total Emissions
Nitrogen Oxides	None	108.94	108.94
Carbon Monoxide	None	75.50	75.50
Particulate Matter (PM <sub>10</sub> )	2.21	15.27	17.48
Sulfur Dioxide	None	4.36	4.36
Volatile Organic Compounds	40.3	10.77	50.80
Hazardous Air Pollutants	12.58	3.56	16.14

Since testing for NO<sub>x</sub> and CO was required for the retrofitted boiler, the four new boilers, and the two new gas turbines (see Part B, Section IV), the potential-to-emit estimates for NO<sub>x</sub> and CO in the preceding table have been updated by the Control Officer based upon test results.

The University of Arizona is a major source of nitrogen oxides and a minor source for all other criteria and hazardous air pollutants.

All terms and conditions of this permit are federally enforceable unless specifically indicated otherwise.

Summary of Permit Requirements  
University of Arizona - Permit Number 2371

Summary Table

(References to PCC are references to Title 17 of the Pima County Code)

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel being fired, and that commenced construction, modification, or reconstruction after October 3, 1977. [40 CFR Part 60 Subparts A and GG, SIP Rule 321, SIP Rule 343, and PCC 17.16.340]	NO <sub>x</sub>	Low NO <sub>x</sub> combustors required on both units.	$\text{STD} = 0.0150 \frac{(14.4)}{Y} + F$ Exclusive use of natural gas fuel.	Monitor the sulfur content of the fuel being fired.	Report date of construction.	Initial test for NO <sub>x</sub> and CO using EPA Test Method 20 for NO <sub>x</sub> and EPA Test Method 10 for CO not later than 180 days after achieving the maximum production rate.  Periodic tests for NO <sub>x</sub> and CO as required by rule.  SO <sub>2</sub> and PM <sub>10</sub> tests are not normally required.  EPA Test Method 9 may be used to monitor compliance with the opacity standard.
	CO	CO catalyst required on the 7 MW unit.	Exclusive use of natural gas fuel.	Monitor the occurrence and duration of any startup, shutdown, or malfunction.	Report date of initial startup.	
	PM <sub>10</sub>	None.	$E = 1.02Q^{0.769}$ Exclusive use of natural gas fuel.		Report any changes to the turbines that may increase emission rates.	
	Visible Emissions (opacity)			≤40% except for cold equipment during the first ten minutes.  Exclusive use of natural gas fuel.	Record the sulfur content of the fuel being fired by maintaining a vendor provided copy of the FERC approved tariff agreement.	
	SO <sub>2</sub> , VOC, HAPs			Sulfur content of fuel limited to 0.8% by weight.  Exclusive use of natural gas fuel.	Report any changes to the tariff agreement that results in a change in the sulfur content.	
					Maintain a file of all test results and other monitoring activities in a permanent form suitable for inspection.	
					Retain all records for at least five years.	

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Stationary rotating machinery (i.e., all stationary and portable internal combustion engines operating within the facility) [SIP Rule 321, SIP Rule 332 and PCC 17.16.340]	PM <sub>10</sub>	None.	E=1.02Q <sup>0.769</sup> Or E=17.0Q <sup>0.432</sup>	Monitor daily the sulfur content and lower heating value of the fuel being fired.	Maintain records of the sulfur content and lower heating value of the fuels being used as follows: 1. For natural gas, maintain a copy of the FERC approved tariff agreement, and, 2. For all other fuels, maintain a copy of the fuel vendor supplied data sheet specifying the sulfur content and lower heating value of the specific fuel.  For the gasoline engines specifically identified, maintain an operating log specifying operating hours. Calculate and record 12-month rolling total engine operating hours for each engine.  Report any daily period when the sulfur content of the fuel exceeded 0.8%.	SO <sub>2</sub> and PM <sub>10</sub> tests are not normally required.  EPA Test Method 9 may be used to monitor compliance with the opacity standard.
	Visible Emissions (opacity)		≤40% except for periods not to exceed 10 consecutive seconds.  ≤60% for cold equipment or when accelerated under load.	Monitor the opacity of all units firing diesel fuel and rated at 600 h.p. or more at least quarterly.		
	SO <sub>2</sub>		Use of high sulfur fuel is prohibited	Monitor the operating hours for the specifically identified engines firing gasoline fuel using the installed nonresettable hour meters.		
	CO		Specifically identified gasoline fueled engines limited to indicated annual hours of use per rolling 12-month period.			
	NO <sub>x</sub> , VOC, and HAPs		None			

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Fossil-fuel fired steam generators and general fuel burning equipment [40 CFR 60, Subpart Dc, SIP Rule 321, SIP Rule 332, and PCC 17.16.160]	PM <sub>10</sub> and Visible Emissions (opacity)	Lo NOx combustors required on the specified units.	E=1.02Q <sup>0.769</sup> Or E=17.0Q <sup>0.432</sup>  ≤20% opacity.	Install non-resettable hour meters on specified boilers.	Report date of construction, anticipated startup, and actual startup for specified boilers.	Within 180 days of achieving maximum production rate, initial tests for NO <sub>x</sub> and CO using EPA test Methods 7 and 10 respectively.  Periodic tests for NO <sub>x</sub> and CO as required by rule.  SO <sub>2</sub> and PM <sub>10</sub> tests are not normally required for units combusting natural gas exclusively.  EPA Test Method 9 may be used to monitor compliance with the opacity standard.
	SO <sub>2</sub>		Fuel limited to pipeline quality natural gas for specified boilers.  Operating hour restriction for specified boilers.  Use of high sulfur oil is prohibited.  ≤1.0 lb SO <sub>2</sub> per 10 <sup>6</sup> Btu or ≤0.8 lb SO <sub>2</sub> per 10 <sup>6</sup> Btu depending on equipment age and fuel type.	Monitor 12-month rolling total operating hours for specified boiler sets.  Fuel monitoring required.  At least quarterly opacity monitoring for boilers rated at 1,000,000 Btu/hr or more and firing liquid or solid fuel.	Record 12-month rolling total operating hours for specified boilers.  Maintain records of the type of fuel combusted in each unit that does not combust natural gas exclusively.  Record results of the quarterly opacity monitoring.	
	NO <sub>x</sub>		≤0.20 lb NO <sub>x</sub> , or ≤0.30 lb NO <sub>x</sub> , or ≤0.70 lb NO <sub>x</sub> per 10 <sup>6</sup> Btu depending on fuel type.			
	CO, VOC, and HAPs		None.			

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Fuel storage tanks [SIP Rule 314, SIP Rule 344, PCC 17.16.230, and PCC 17.16.430.D]	VOC and HAPs	Submerged fill tube  Mechanical seals or the equivalent	Emissions may not cause "air pollution".	Maintain a file of the type of petroleum liquid stored, typical Reid vapor pressure and dates of storage.	Record storage tank I.D., date of fuel delivery, type and amount of fuel delivered, typical Reid vapor pressure of the fuel, and the dates storage tank is empty.	Not required.
Incinerator [SIP Rule 313, SIP Rule 321, PCC 17.16.170, and PCC 17.16.510]	PM <sub>10</sub> and other visible emissions.	Use of an afterburner.  Preheat device in accordance with manufacturer's recommendations.	Operate only during daylight hours.  Opacity ≤20%.  Mass emissions ≤0.08 grains per dscf.	Monitor daily charging rates and hours of operation.	Record weight of each charge, description of material, time when preheating began, time operation ended.	At least one test during the permit term, using EPA Test Method 5, to monitor compliance with the mass emissions limit.  EPA Test Method 9 may be used to monitor compliance with the opacity standard.
Surface coating operations [PCC 17.16.400]	VOC and HAPs	Keeping containers covered and leak-free.  Use of enclosures and filters when spray painting.	Control evaporation and leakage.  Paint overspray controlled at ≥96%.  No photochemically reactive solvents allowed in any architectural coating.  Limits on VOC content for coating of miscellaneous metal parts and products.	Monitor VOC and HAP content of each coating and solvent product used by Facilities Management staff including contract work.	Maintain a file of MSDS sheets for each coating and solvent product used by Facilities Management staff including contract work. Architectural coatings and solvents to be filed separately.	Not required.
Cooling towers [PCC 17.16.530.B.12]	PM (chromium)	Limit the use of chromium-based water treatment chemicals.	Residual hexavalent chromium concentration ≤0.5 ppmw.	Monitor the chemical composition of water treatment chemicals.	Maintain a copy of the MSDS for all water treatment chemical used.	Analyze cooling water samples at the request of the Control officer using the test methods identified in the permit.

Emission Unit	Pollutants Emitted	Control Measures	Emission Limits/Standards	Monitoring	Recordkeeping/Reporting	Testing Frequency/Methods
Storage piles [SIP Rule 316.D and PCC 17.16.110.A]	PM	Cover, enclose, use of dust suppressants, wetting, maintaining vegetative growth, or equivalent.	Emissions from storage piles shall be minimized.	Monitor all outdoor storage piles at least quarterly.	Record results of the quarterly checks to include date, type of material, control measure taken, indications of excessive dust, name of inspector.	Not required.
Demolition/Renovation [PCC 17.16.530.A.8]	Asbestos.	As required by rule.	As required by rule.	Relevant paperwork on file.	Relevant paperwork on file.	Not required.
Nonvehicle air conditioner maintenance and/or service [40 CFR 82, Subpart F]	Ozone depleting substances.	As required by rule.	As required by rule.	Relevant paperwork on file.	Relevant paperwork on file.	Not required.
All activities and operations [SIP Rule 321, SIP Rule 343, PCC 17.16.040, and PCC 17.16.050]	Visible emissions.	As previously listed.	Opacity $\leq 40\%$ (or lower as previously indicated).  Visible emissions may not cross a property line without imposition of an appropriate control.	As previously listed.	Recordkeeping and reporting as previously listed.  Report excess emissions and permit deviations.  Semiannual reports of required monitoring.  Semiannual compliance certifications.  Annual emissions inventory report upon request of the Control Officer.	EPA Test Method 9 may be used to monitor compliance with the opacity standard.

TABLE OF CONTENTS

Part "A": General Provisions ..... 9

    I. Permit Expiration and Renewal ..... 9

    II. Compliance with Permit Conditions ..... 9

    III. Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause ..... 9

    IV. Posting of Permit ..... 10

    V. Fee Payment ..... 10

    VI. Annual Emissions Inventory Questionnaire ..... 10

    VII. Compliance Certification ..... 10

    VIII. Certification of Truth, Accuracy and Completeness ..... 11

    IX. Inspection and Entry ..... 11

    X. Permit Revision Pursuant to Federal Hazardous Air Pollutant Standard ..... 12

    XI. Excess Emissions, Permit Deviations, And Emergency Reporting ..... 12

    XII. Record Keeping Requirements ..... 17

    XIII. Reporting Requirements ..... 17

    XIV. Duty to Provide Information ..... 18

    XV. Permit Amendment or Revision ..... 18

    XVI. Facility Change Without Permit Revision ..... 18

    XVII. Testing Requirements ..... 20

    XVIII. Property Rights ..... 21

    XIX. Severability Clause ..... 21

    XX. Permit Shield ..... 21

    XXI. Accident Prevention Requirements Under the Clean Air Act (CAA Section 112(r)) ..... 21

Part "B": Specific Provisions ..... 22

    I. Emission Limits and Standards ..... 22

    II. Monitoring of Operations ..... 31

    III. Recordkeeping and Reporting Requirements ..... 33

    IV. Testing Requirements ..... 37

Part "C": Applicable Regulations ..... 45

Part "D": Equipment List ..... 46

Part "E": Equipment List ..... 51

**Permit Issued To University Of Arizona  
Air Quality Permit # 2371**

**PART A: GENERAL PROVISIONS**

(References to A.R.S. are references to the Arizona Revised Statutes, references to A.A.C. are references to the Arizona Administrative Code, and references to PCC are references to Title 17 of the Pima County Code)

I. PERMIT EXPIRATION AND RENEWAL [PCC 17.12.160.C.2 & PCC 17.12.180.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not greater than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [PCC 17.12.180.A.8.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. Need to halt or reduce activity not a defense. 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.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE [PCC 17.12.180.A.8.c & PCC 17.12.270]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. 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.
- B. The permit shall be reopened and revised under any of the following circumstances:
  - 1. Additional applicable requirements under the Act become applicable to a major source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to PCC 17.12.280. Any permit reopening required pursuant to this paragraph shall comply with provisions in PCC 17.12.280 for permit renewal and shall reset the five-year permit term.
  - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The control officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  4. The control officer or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Part shall not result in the resetting of the five-year permit term.

IV. POSTING OF PERMIT [PCC 17.12.080]

The Permittee who has been granted an individual permit by PDEQ or a general permit by ADEQ shall maintain a complete copy of the permit onsite. If it is not feasible to maintain a copy of the permit onsite, the permittee may request, in writing, to maintain a copy of the permit at an alternate location. Upon written approval by the Control Officer, the permittee must maintain a complete copy of the permit at the approved alternative location.

V. FEE PAYMENT [PCC 17.12.180.A.9 & PCC 17.12.510]

Permittee shall pay fees to the control officer pursuant to PCC 17.12.510.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE [PCC 17.12.320]

- A. 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 the request and provides the inventory form each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. 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.

VII. COMPLIANCE CERTIFICATION [PCC 17.12.180.A.5 & PCC 17.12.220.A.2]

Permittee shall submit to the control officer a compliance certification that describes the compliance status of the source with respect to each permit condition. Certifications shall be submitted as specified in Part "B" of this permit.

- A. The compliance certification shall include the following:

1. Identification of each term or condition contained in the permit including emission limitations, standards, or work practices that are the basis of the certification;
  2. Identification of method(s) or other means used by the owner or operator for determining the compliance status of the source with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the methods and means required under the monitoring, related recordkeeping and reporting sections of this permit;
  3. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification; and
  4. A progress report on all outstanding compliance schedules submitted pursuant to PCC 17.12.220.
- B. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator. The address for the EPA administrator is:

**EPA Region 9 Enforcement Office, 75 Hawthorne St (Air-5), San Francisco, CA 94105**

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [PCC 17.12.220.A.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required by this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY [PCC 17.12.220.A.4]

The Permittee shall allow the control officer or the authorized representative of the control officer upon presentation of proper credentials to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[PCC 17.12.160.C.4]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

[PCC 17.12.040]

A. Excess Emissions Reporting

[PCC 17.12.040]

1. Excess emissions shall be reported as follows:

a. 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:

i. Notification of 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 call to report excess emissions is **520-740-3340**.

ii. Detailed written notification by submission of an excess emissions report within 72 hours of the notification under subsection 2 above. **Send to PDEQ 150 W. Congress St., Tucson, Arizona 85701.**

b. The excess emission report shall contain the following information:

i. The identity of each stack or other emission point where the excess emission occurred;

ii. The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;

iii. The time and duration or expected duration of the excess emissions;

- iv. The identity of the equipment from which the excess emissions emanated;
- v. The nature and cause of the emissions;
- vi. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunctions;
- vii. The steps that were or are being taken to limit the excess emissions; If the source's permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the permit procedures.

- 2. In the case of continuous or recurring excess emissions, the notification requirements of this Section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsections A.1 above.

B. Permit Deviations Reporting [PCC 17.12.180.A.5.b]

Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Notice in accordance with 17.12.180.E.3.d shall be considered prompt for purposes of this paragraph.

C. Emergency Provision [PCC 17.12.180.E]

- 1. An "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emission attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the conditions of PCC 17.12.180.E.3 are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause or causes of the emergency;

- b. At the time of the emergency, the permitted facility was being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - d. The permittee submitted notice of the emergency to the control officer by certified mail or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken
- 4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
  - 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Compliance Schedule

[ARS § 49-426.1.5]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown.

[PCC 17.12.035]

1. Applicability

This rule establishes affirmative defenses for certain emission in excess of a n emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act,
- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act,
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. E.P.A., or
- d. Included in a permit to meet the requirements of PCC 17.16.590.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of XIII.B of this Part and has demonstrated all of the following:

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the operator;
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the owner or operator satisfactorily demonstrated that the measures were impracticable;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in PCC Chapter 17.08 that could be attributed to the emitting source;
- h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
- i. All emissions monitoring systems were kept in operation if at all practicable; and
- j. The owner or operator's actions in response to the excess emissions were documented by contemporaneous records.

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in XI.C.2 of this Part, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable

emission limitation due to startup and shutdown shall constitute a violation. The owner or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner or operator of the source has complied with the reporting requirements of XIII.B of this Part and has demonstrated all of the following:

- i. The excess emissions could not have been prevented through careful and prudent planning and design;
  - ii. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
  - iii. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
  - iv. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
  - v. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
  - vi. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in PCC Chapter 17.08 that could be attributed to the emitting source;
  - vii. All emissions monitoring systems were kept in operation if at all practicable; and
  - viii. The Permittee's actions in response to the excess emissions were documented by contemporaneous records.
- b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to XI.B of this Part.
4. Affirmative Defense for Malfunctions During Scheduled Maintenance
- If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to XI.B of this Part.
5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under XI.B or C of this Part, the owner or operator of the source shall demonstrate, through submission of the data and information required by XI.E.5 and XII.B of this Part, that all reasonable and practicable measures within the owner or operator's control were implemented to prevent the occurrence of the excess emissions.

## XII. RECORD KEEPING REQUIREMENTS

[PCC 17.12.180.A.4]

- A. Permittee shall keep records of all required monitoring information including, where applicable, the following:
  - 1. The date, place as defined in the permit, and time of sampling or measurements;
  - 2. The date(s) analyses were performed;
  - 3. The name of the company or entity that performed the analyses;
  - 4. A description of the analytical techniques or methods used;
  - 5. The results of such analyses; and
  - 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- C. All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

## XIII. REPORTING REQUIREMENTS

[PCC 17.12.180.A.5.a]

The Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- A. Compliance certifications pursuant to VII of this Part.
- B. Excess emission; permit deviation, and emergency reports in accordance with XI of this Part.
- C. Performance test results in accordance with XVII.F of this Part.
- D. Reporting requirements listed in Part B of this permit.

XIV. DUTY TO PROVIDE INFORMATION

[PCC 17.12.160.G & PCC 17.12.180.A.8.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, for Class I sources, shall furnish an additional copy of such records directly to the Administrator 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.

XV. PERMIT AMENDMENT OR REVISION

[PCC 17.12.245, PCC 17.12.255 & PCC 17.12.260]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under XVI of this Part, as follows:

- A. Administrative Permit Amendment (PCC 17.12.245);
- B. Minor Permit Revision (PCC 17.12.255);
- C. Significant Permit Revision (PCC 17.12.260).

The applicability and requirements for such action are defined in the above referenced regulations.

XVI. FACILITY CHANGES WITHOUT PERMIT REVISION

[PCC 17.12.230]

- A. A facility with a Class I permit may make changes without a permit revision if all of the following apply:
  - 1. The changes are not modifications under any provision of Title I of the ACT (Air Pollution Prevention and Control) or under A.R.S. 49-401.01(17);
  - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;
  - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;
  - 4. The changes satisfy all requirements for a minor permit revision under PCC 17.12.255; and
  - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if the substitution meets all of the requirements of XVI.A, D and E of this Part.
- C. Except for sources with authority to operate under general permits, permitted sources may trade increases and decreases in emissions within the permitted facility, as established in the permit under 17.12.180.A.12 if an applicable implementation plan provides for the emissions trades, without applying for a permit revision and based on the seven working days notice prescribed in XVI.D of this Part. This provision is available if the permit does not provide for the emissions trading as a minor permit revision.
- D. For each change under XVI.A through C of this Part, a written notice, by certified mail or hand delivery, shall be received by the control officer and the Administrator a minimum of seven (7) working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change, or if advance notification is not practicable as soon after the change as possible.
- E. Each notification shall include:
  - 1. When the proposed change will occur;
  - 2. A description of the change;
  - 3. Any change in emissions of regulated air pollutants;
  - 4. The pollutants emitted subject to the emissions trade, if any;
  - 5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade;
  - 6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply; and
  - 7. Any permit term or condition that is no longer applicable as a result of the change.
- F. The permit shield described in PCC 17.12.310 shall not apply to any change made under XVI.A through C of this Part. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the implementation plan authorizing the emissions trade.
- G. Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as proved under PCC 17.12.180.A.11 shall not require any prior notice under XVI this Part.

- H. Notwithstanding any other part of this Section, the control officer may require a permit to be revised for any change that when considered together with any other changes submitted by the same source under this section over the term of the permit, do not satisfy XVI.A of this Part.

## XVII. TESTING REQUIREMENTS

[PCC 17.12.050]

### A. Operational Conditions During Testing

Tests shall be conducted while the unit is operating at full load under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the control officer, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in PCC 17.04.340.A.) shall not constitute representative operational conditions unless otherwise specified in the applicable requirement.

- B. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Control Officer pursuant to PCC 17.12.050.B.

### C. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the control officer, in accordance with PCC 17.12.050.B. and the Arizona Testing Manual.

### D. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

### E. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control, compliance may, upon the Control Officer's approval, be determined using the arithmetic mean of the results of the other two runs. If the Control Officer or the Control Officer's designee is present, tests may only be stopped with the Control

Officer's or such designee's approval. If the Control Officer or the Control Officer's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

F. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the control officer within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual.

XVIII. PROPERTY RIGHTS

[PCC 17.12.180.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XIX. SEVERABILITY CLAUSE

[PCC 17.12.180.A.7]

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.

XX. PERMIT SHIELD

[PCC 17.12.310]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Part "C" of this permit. The permit shield shall not apply to any change made pursuant to Section XV.B of this Part and Section XVI of this Part.

XXI. ACCIDENT PREVENTION REQUIREMENTS UNDER THE CLEAN AIR ACT (CAA Section 112(r))

Should this stationary source, as defined in 40 CFR Part 68.3, become subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit a risk management plan (RMP) by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the semiannual compliance certification as required by 40 CFR Part 70 and Part B of this permit.

Part "B": SPECIFIC CONDITIONS  
Air Quality Control Permit No. 2371  
For  
University of Arizona

I. EMISSION LIMITATIONS AND STANDARDS.

- A. Facilities subject to the New Source Performance Standards (NSPS) for Stationary Gas Turbines (40 CFR Part 60, Subpart GG).

The provisions of this paragraph are applicable to the following affected facilities: all stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel being fired, and that commenced construction, modification, or reconstruction after October 3, 1977. The two units to which this paragraph applies are the 7 megawatt gas turbine in the Central Heating and Refrigeration Plant (Building 46) and the 5 megawatt gas turbine in the Arizona Health Sciences Center Heating and Refrigeration Plant (Building 205).

[40 CFR, §60.330(a) and (b)]

1. On and after the date of the performance test required by IV.A.1 of this Part is completed, the Permittee shall not cause to be discharged into the atmosphere from the gas turbines any gases which contain nitrogen oxides in excess of:

$$\text{STD} = 0.0150 \frac{(14.4)}{Y} + F \quad [40 \text{ CFR } 60, \text{ §}60.332(a)(2)]$$

where:

STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = 0.

2. Particulate Emissions

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary gas turbine engine having a heat input rate of 4200 million Btu per hour or less in excess of the amounts calculated by the following equation:

[PCC 17.16.340.C.1]

**[Non-Federally Enforceable Condition]**

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

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

Q = the heat input in million Btu per hour.

3. Visibility Restriction.
  - a. Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary gas turbine engine, smoke for any period of time greater than ten consecutive seconds, which exceeds 40 percent opacity. [SIP Rule 343, 321 & PCC 17.16.340.E]
  - b. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [PCC 17.16.340.E]  
**[Non-Federally Enforceable Condition]**
4. The Permittee shall combust only pipeline quality natural gas in the stationary gas turbine engines. [PCC 17.12.190.B]**[Material Permit Condition]**
5. Permittee shall not burn fuel in either gas turbine that contains sulfur in excess of 0.8% by weight. [40 CFR §60.333(b)]**[Material Permit Condition]**
6. The Permittee shall equip both gas turbines with Lo NO<sub>x</sub> combustor technology and the 7-megawatt unit shall also be equipped with a CO catalyst to reduce the emissions of CO. [PCC 17.12.190.B]**[Material Permit Condition]**
7. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator or the Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR §60.11(d) & PCC 17.16.020.A]
8. The Permittee shall not shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR, §60.12 & PCC 17.20.040]

B. Stationary Rotating Machinery.

The provisions of this paragraph are applicable to all the stationary and portable internal combustion engines operating within the facility.

1. The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery in excess of the amounts calculated by one of the following equations:

- a. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation: [SIP Rule 332 & PCC 17.16.340.C]

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

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

Q = the heat input in million Btu per hour.

- b. For equipment having a heat input rate greater than 4200 million Btu/hr., the maximum allowable emissions shall be determined by the following equation:

$$E = 17.0Q^{0.432}$$

where "E" and "Q" have the same meaning as in I.B.1.a of this Part.

- c. The actual values shall be calculated from the applicable equations and rounded off to two decimal places. [PCC 17.16.340.D]

2. The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than ten consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be limited to 60 percent opacity for the first ten minutes and diesel engines accelerated under load shall be limited to 60 percent opacity. [SIP Rule 321 & PCC 17.16.340.E]

3. The Permittee is prohibited from using high sulfur fuel oil (i.e, fuel oil with a sulfur content of 0.9 percent or more by weight). [PCC 17.16.340.H]

**[Non-Federally Enforceable] [Material Permit Condition]**

4. When low sulfur oil is fired, the Permittee shall not allow emissions of sulfur dioxide to exceed 1.0 pound of sulfur dioxide per million Btu heat input.

[PCC 17.16.340.H]**[Non-Federally Enforceable Condition]**

5. The Permittee shall not operate each gasoline-fueled engine listed in the following table more than the annual number of hours indicated for each engine (as calculated on a 12-month rolling total): [PCC 17.12.190.B]

**[Material Permit Condition]**

Gasoline Fueled Engines			
Description	Unit I.D.	Capacity	Annual Hours
Pressure Washer	170001	11 h.p.	400
Pressure Washer	170002	5.5 h.p.	300
Pressure Washer	170003	16 h.p.	600
Arc Welder	440110	46 h.p.	400
Arc Welder	440113	10 h.p.	600
Arc Welder	440114	10 h.p.	600
Arc Welder	440115	30 h.p.	600

6. The Permittee shall not operate any equipment listed as an emergency generator in Part D of this Permit for more than 100 hrs/yr except during periods when normal electrical power is interrupted. [PCC 17.12.190.B]  
**[Material Permit Condition]**

C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment.

The provisions of this paragraph are applicable to steam generators and general fuel burning equipment in which fuel is burned for the primary purpose of producing power, steam, hot water, hot air, or other liquids, gases, or solids and in which the products of combustion do not come in direct contact with process materials. [PCC 17.16.160.A]

1. The Permittee shall not cause, allow, or permit the emission of particulate matter in excess of the amounts calculated by one of the following equations:

- a. For equipment having a heat input rate of 4200 million Btu per hour or less, the maximum allowable emissions shall be determined by the following equation: [SIP Rule 332 & PCC 17.16.160.C.1]

$$E=1.02Q^{0.769}$$

Where:

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

Q=the heat input in million Btu per hour.

- b. For equipment having a heat input rate of greater than 4200 million Btu per hour, the maximum allowable emissions shall be determined by the following equation: [SIP Rule 332 & PCC 17.16.160.C.2]

$$E=17.0Q^{0.432}$$

Where:

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

Q=the heat input in million Btu per hour.

2. The Permittee shall combust only pipeline quality natural gas in the following boilers: [PCC 17.12.190.B]  
**[Material Permit Condition]**

- a. The 67,500,000 Btu boiler in Building 46.  
b. The 59,520,000 Btu boiler in Building 46.  
c. The 59,520,000 Btu boiler in Building 46.  
d. The 42,200,000 Btu boiler in Building 205.  
e. The 42,200,000 Btu boiler in Building 205.

3. The Permittee shall not use high sulfur oil in any of the equipment described in I.C of this Part. [PCC 17.16.160.G]  
**[Material Permit Condition]**
4. When low sulfur oil is fired:
- a. Existing fuel burning equipment or steam power generating installations which commenced construction or a major alteration prior to May 30, 1972 shall not emit more than 1.0 pound of sulfur dioxide maximum three hour average, per million Btu heat input. [PCC 17.16.160.D.1]  
**[Non-Federally Enforceable Condition]**
- b. Existing fuel burning equipment or steam power generating installations which commenced construction or a major alteration after May 30, 1972 shall not emit more than 0.80 pounds of sulfur dioxide maximum three hour average, per million Btu heat input. [PCC 17.16.160.D.2]  
**[Non-Federally Enforceable Condition]**
5. When solid fuel is fired:
- a. Existing fuel burning equipment and steam power generating installations which commenced construction or a major alteration prior to May 30, 1972 shall not emit more than 1.0 pound of sulfur dioxide maximum three hour average, per million Btu heat input. [PCC 17.16.160.F.1]**[Non-Federally Enforceable Condition]**
- b. Existing fuel burning equipment and steam power generating installations which commenced construction or a major alteration after May 30, 1972 shall not emit more than 0.80 pounds of sulfur dioxide maximum three hour average, per million Btu heat input. [PCC 17.16.160.F.2]**[Non-Federally Enforceable Condition]**
6. The Permittee shall not allow nitrogen oxide emissions from existing steam power generating installations that commenced construction or a major alteration after May 30, 1972 in excess of the following amounts:  
**[Non-Federally Enforceable Condition]**
- a. 0.20 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when gaseous fossil fuel is fired. [PCC 17.16.160.H.1]
- b. 0.30 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when liquid fossil fuel is fired. [PCC 17.16.160.H.2]
- c. 0.70 pounds of nitrogen oxides, maximum three-hour average, calculated as nitrogen dioxide, per million Btu heat input when solid fossil fuel is fired. [PCC 17.16.160.H.3]
7. The Permittee shall equip all boilers identified in I.C.2 with Lo NO<sub>x</sub> combustor technology. [PCC 17.12.190.B]**[Material Permit Condition]**

D. Fuel Storage Tanks.

1. Petroleum liquid storage tanks shall be equipped with a submerged filling device, a refrigeration-type vapor recovery system, or acceptable equivalent, for the control of hydrocarbon emissions. [SIP Rule 314 & PCC 17.16.230.B]  
**[Material Permit Condition]**
2. The Permittee shall not cause nor permit malodorous emissions to cross a property line without minimizing those emissions. [SIP Rule 344 & PCC 17.16.430.D]
3. 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]  
**[Non-Federally Enforceable][Material Permit Condition]**

E. Incinerator.

1. The incinerator shall be operated only between the hours of sunrise and sunset. [SIP Rule 313 & PCC 17.16.170.A]**[Material Permit Condition]**
2. The Permittee shall not cause, allow, or permit to be emitted into the atmosphere, smoke, fumes, gases, particulate matter, or other gas-borne material that exceeds 20 percent opacity except for not more than 30 seconds in any 60-minute period. [SIP Rule 321, PCC 17.16.170B. & E]
3. The Permittee shall not combust any material in the incinerator without the afterburner being operated. [PCC 17.12.190.B]
4. The Permittee shall preheat the incinerator in accordance with the manufacturer's recommendations. [PCC 17.12.190.B]
5. The Permittee shall not cause, allow, or permit the discharge of particulate matter into the atmosphere in any one hour from any incinerator, in excess of 0.08 grains per cubic foot, based on dry flue gas at standard conditions, corrected to 12 percent carbon dioxide. [PCC 17.16.170.C.1 & 17.16.510]  
**[Non-Federally Enforceable Condition]**

F. Surface Coating Operations.

1. The Permittee shall not transport or store volatile organic compounds without taking necessary and feasible measures to control evaporation, leakage, or other discharge into the atmosphere. [PCC 17.16.400.A]  
**[Non-Federally Enforceable Condition]**
2. The Permittee shall not conduct any spray paint operations without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray. [PCC 17.16.400.C.1]  
**[Non-Federally Enforceable Condition]**

3. No person shall either: [PCC 17.16.400.C.2]  
**[Non-Federally Enforceable Condition]**
- a. Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
  - b. Thin or dilute any architectural coating with a photochemically reactive solvent.
4. For purposes of paragraph I.F.3.a, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in subparagraphs a through c of this paragraph, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent: [PCC 17.16.400.C.3]  
**[Non-Federally Enforceable Condition]**
- a. A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation -- hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent.
  - b. A combination of aromatic compounds with eight or more carbon atoms to the molecule, except ethylbenzene: eight percent.
  - c. A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.
  - d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described previously, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
5. No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may operate a coating application system subject to this Section that emits volatile organic compounds in excess of any of the following: [PCC 17.16.400.C.5] **[Non-Federally Enforceable Condition]**
- a. 4.3 pounds per gallon (0.5 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies clear coatings.
  - b. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to 194°F (90°C).
  - c. 3.5 pounds per gallon (0.42 kilograms per liter) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings.

- d. 3.0 pounds per gallon (0.36 kilograms per liter) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.
- e. If more than one emission limitation previously described applies to a specific coating, then the least stringent emission limitation shall be applied.
- f. All VOC emissions from solvent washings shall be considered in the emission limitations unless the solvent is directed into containers that prevent evaporation into the atmosphere.

G. Cooling Towers.

- 1. The Permittee shall not use chromium-based water treatment chemicals in any cooling tower. For the purposes of this standard, "chromium-based water treatment chemicals" means any combination of chemical substances containing chromium used to treat water in cooling towers including corrosion inhibitors, antiscalants, dispersants and any other chemical substance used to treat water.  
[PCC 17.12.190.B][**Material Permit Condition**]
- 2. A cooling water sample residual hexavalent chromium concentration equal to or less than 0.5 parts per million by weight shall indicate compliance with I.G.1.  
[PCC 17.16.530.B.12]

H. Storage Piles.

Dust emissions from storage of materials must be minimized by enclosing the material within structures, planting and maintaining vegetative growth over the material, use of chemical dust suppressants, wetting, covering, or other equivalently effective controls.  
[SIP Rule 316.D & PCC 17.16.110.A]

I. Demolition/Renovation.

The Permittee shall comply with all of the requirements of 40 CFR 61, Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos). [PCC 17.16.530]

J. Nonvehicle Air Conditioner Maintenance and/or Services.

The Permittee shall comply with all of the requirements of 40 CFR 82, Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction).  
[40 CFR 82, Subpart F]

K. All Activities and Operations.

1. The Permittee shall not cause or permit the effluent from a single emission point, multiple emissions point, or fugitive emissions source to have an average optical density greater than 20 percent (or such other value as indicated in I.A.3, I.B.2, or I.E.2) subject to the following provisions: [SIP Rule 321 & PCC 17.16.040]
  - a. Opacities (optical densities) 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.  
  
*The Permittee is not required to have a certified visible emissions evaluator on staff. The Permittee may hire a certified visible emissions evaluator on a contract basis.*
  - 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 herein. 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 25. Sets need not be consecutive in time, and in no case shall be 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.
  - c. The use of air or other gaseous diluents solely for the purpose of achieving compliance with an opacity standard is prohibited.
2. The Permittee shall not cause or permit the airborne diffusion of visible emissions beyond the property boundary line within which the emissions become airborne. [SIP Rule 343 & PCC 17.16.050]
  - a. Within actual practice, the airborne diffusion of visible emissions across property lines shall be prevented by appropriately controlling the emissions at the point of discharge, or ceasing entirely the activity or operation which is causing or contributing to the emissions.
  - b. The provisions of I.K.2 shall not apply when the naturally induced wind speed exceeds 25 miles per hour as estimated by a certified visible emissions evaluator using the Beaufort Scale of Wind-Speed equivalents, or as recorded by a U.S. weather Bureau Station or a U.S. government military installation.
  - c. Any disregard of, neglect of, or inattention to other controls required herein, during any time when the provisions of I.K.2 is in effect, shall automatically waive the exception, and such relaxation of controls shall be a violation.

## II. MONITORING OF OPERATIONS

### A. Gas Turbines.

1. The Permittee shall monitor and record the sulfur content of the fuel being fired in the turbines. When firing natural gas fuel, the Permittee may comply with this requirement by maintaining a vendor provided copy of the Federal Energy Regulatory Commission (FERC) approved tariff agreement that limits the sulfur content of transmitted pipeline quality natural gas to less than 0.8% sulfur by weight. The Permittee shall report any change in the tariff agreement that results in a higher allowable sulfur content. [PCC 17.12.180.A.3]
2. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR §60.7(b)]
3. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years (per 40 CFR §60.7(f)(3)) following the date of such measurements, maintenance, reports, and records. [40 CFR §60.7(f) & PCC 17.12.180.A.4(b)]
4. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in 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 requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR §60.11(g)]

### B. Stationary Rotating Machinery.

1. The Permittee shall monitor daily the sulfur content and lower heating value of the fuel being fired in the machine. [PCC 17.16 340.I]
2. The Permittee shall monitor the opacity at least quarterly of all stationary rotating machinery firing diesel fuel and rated at 447 kW (600 h.p.) or more. [PCC 17.12.180.A.3]
3. If not already installed, the Permittee shall install a nonresettable hour meter on each of the gasoline engines identified in I.B.5 of this Part and shall monitor the hours of operation of each engine using its hour meter. [PCC 17.12.180.A.3]
4. A demonstration to show compliance with the emission limit(s) for particulate matter pursuant to I.B.1.a of this Part shall not be required unless the Control

Officer has reason to believe that conditions may exist which have the potential to cause a violation of the applicable requirement. This is because use of the referenced equation yields higher calculated allowable emissions than those obtained using standard emission factors representative for this class of equipment.

C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment.

1. The Permittee shall install a nonresettable hour meter on each boiler identified in I.C.2 of this Part. [PCC 17.12.180.A.3][**Material Permit Condition**]
2. The Permittee shall monitor the fuel being combusted in the boilers identified in I.C.2 of this Part. [PCC 17.12.180.A.3]
3. The Permittee shall monitor the opacity at least quarterly of all fossil-fuel fired steam generators and general fuel burning equipment firing liquid or solid fuel and rated at 1,000,000 Btu per hour or greater. [PCC 17.12.180.A.3]

D. Fuel Storage Tanks.

For each petroleum liquid storage tank, the Permittee shall maintain a file of each type of petroleum liquid stored, of the typical Reid vapor pressure of each type of petroleum liquid stored, and of dates of storage. Dates on which the storage vessel is empty shall be shown. [PCC 17.16.230.E.1]

E. Incinerator.

The Permittee shall monitor the daily charging rates and hours of operation of the unit. [PCC 17.16.170.F]

F. Surface Coating Operations. [PCC 17.12.180.A.3]

The Permittee shall monitor the amount of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) in each coating and solvent product used in all surface coating operations conducted by the Permittee's Facilities Management staff to include those surface coating operations contracted to vendors through the offices of Facilities Management.

G. Cooling Towers.

The Permittee shall monitor the chemical composition of all water treatment chemicals used in cooling towers by maintaining a copy of the manufacturer's Material Safety Data Sheet (MSDS), or equivalent product data sheet, for each chemical. [PCC 17.12.180.A.3]

H. Storage Piles.

The Permittee shall monitor all the outdoor storage piles at least quarterly for evidence of excessive dust emissions. [PCC 17.12.180.A.3]

I. Demolition/Renovation:

The Permittee shall keep a record of all relevant paperwork on file. The relevant paperwork shall include but not be limited to the "NESHAP Notification for Renovation and Demolition Activities" form, and all supporting documents.

J. Nonvehicle Air Conditioner Maintenance and/or Services: The Permittee shall keep a record of all paperwork relevant to the applicable requirements of 40 CFR 82, Subpart F on file.

III. RECORDKEEPING AND REPORTING REQUIREMENTS

A. Gas Turbines.

1. The Permittee shall furnish the Administrator and the Control Officer written notification or, if acceptable to both the Administrator and the Permittee, electronic notification, as follows:

a. A notification of the date construction (or reconstruction as defined under 40 CFR, §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. [40 CFR, §60.7(a)(1) & PCC 17.12.180.A.5]

b. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. [40 CFR, §60.7(a)(3)]  
[PCC 17.12.180.A.5]

c. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted in 40 CFR, §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR, §60.7(a)(4) & PCC 17.12.180.A.5]

2. The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility and any malfunction of the air pollution control equipment. [40 CFR, §60.7(b)]  
[PCC 17.12.180.A.5]

3. The Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by III.A of this Part recorded in a permanent form suitable for inspection. The file shall be retained for at five years following the date of such measurements, maintenance, reports, and records. [40 CFR, §60.7(f)]  
[PCC 17.12.180.A.4.b]

B. Stationary Rotating Machinery. [PCC 17.12.180.A.4]

1. The Permittee shall maintain a record of the sulfur content and lower heating value of the fuel being fired in the machine as follows:
  - a. For units firing natural gas, the Permittee shall maintain on site a copy of the Federal Energy Regulatory Commission approved tariff agreement stipulating the sulfur content and heating value of the pipeline quality natural gas.
  - b. For all other fuels, the Permittee shall maintain on site a copy of the fuel vendor supplied data sheet that specifies the sulfur content and heating value of the fuel being supplied.
2. The Permittee shall use the information from the nonresettable hour meters on each of the gasoline engines identified in I.B.5 to prepare a 12-month rolling total of each engine's operating hours as follows:
  - a. Within 5 days of the beginning of a new calendar month, the Permittee shall, for each engine, record and clearly identify on a log the total operating hours for the previous month for each of the gasoline engines.
  - b. The Permittee shall sum, for each engine, the total operating hours for the previous 12-month period and record and clearly identify that entry on the log.
3. The Permittee shall report to the Control Officer any daily period during which the sulfur content of the fuel being fired in the machine exceeds 0.8 percent. [PCC 17.16.340.J]

C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment.

1. For the boilers identified in I.C.2 of this Part, the Permittee shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided in 40 CFR 60, §60.7. This notification shall include:  
[40 CFR, §60.48c(a) & PCC 17.12.180.A.5]
  - a. The design heat input capacity of each boiler and the identification of the fuels to be combusted in each boiler. [40 CFR, §60.48c(a)(1)]  
[PCC 17.12.180.A.5]

b. The annual capacity factor at which the Permittee anticipates operating each boiler based on all fuels fired and based on each individual fuel fired.  
[40 CFR, §60.48c(a)(3) & PCC 17.12.180.A.5]

2. The Permittee shall maintain records of the type of fuel combusted in each unit that does not combust pipeline quality natural gas exclusively. [PCC 17.12.180.A.5]
3. The Permittee shall maintain records of each opacity check conducted pursuant to II.C.3 of this Part. [PCC 17.12.180.A.5]

D. Fuel Storage Tanks.

The Permittee shall maintain a log for each petroleum liquid storage vessel and shall record in the log the following information for each delivery of petroleum liquid:  
[PCC 17.16.230.E.1]

1. The storage tank identifier.
2. The date of delivery.
3. The type and amount of petroleum liquid being delivered.
4. The typical Reid vapor pressure of the petroleum liquid being delivered.
5. Dates on which the storage vessel is empty.

E. Incinerator.

1. The Permittee shall maintain a written record and shall record daily the following information for each incinerator operation: [PCC 17.16.010.C & 17.16.170.F]
  - a. The weight of each charge.
  - b. A description of material incinerated.
  - c. The time when preheating began.
  - d. The time when the incinerator no longer fired (including afterburner firing).
2. Records shall be retained for a minimum of five years and shall be made available to the Control Officer upon request. [PCC 17.12.180.A.4]

F. Surface Coating Operations. [PCC 17.12.180.A.4]

1. The Permittee shall maintain a file of Material Safety Data Sheets (MSDS) or equivalent manufacturer's product data sheet for each coating and solvent product

used by Facilities Management Staff or vendors contracted through the offices of Facilities Management to conduct surface coating operations within the facility.

2. Data Sheets for architectural coatings shall be maintained in an easily identified file that is kept separately from the file for all other coating products.
3. The files shall be retained for a minimum of five years and shall be made available to the Control Officer upon request.

G. Cooling Towers.

The Permittee shall maintain a file of all MSDS, or equivalent product data sheets, for each water treatment chemical used in the cooling towers. The file shall be retained for a minimum of five years and shall be made available to the Control Officer upon request.  
[PCC 17.12.180.A.4]

H. Storage Piles.

The Permittee shall maintain a written record of the quarterly checks conducted for each storage pile. The record shall include, at minimum, the following information:  
[PCC 17.12.180.A.4]

1. The date of the check.
2. The type of material stored in the pile.
3. The type of action taken to minimize dust emissions from the storage pile.
4. Whether there were any indications of excessive dust emissions from the pile.
5. The printed name and signature of the person recording the check.

I. All Equipment and Operations.

1. Excess Emissions and Permit Deviations.

The Permittee shall report to the Control Officer any emissions in excess of the limits (as defined in PCC 17.04.340.A.78) established by this Part within 24 hours of the time the Permittee first learned of the excess emissions occurrence. The Permittee shall report other deviations from permit requirements in this Part within two working days of the time the Permittee first learned of the occurrence of the deviation. (See Part "A", Section XI for detailed information on these two reports).

2. Semiannual Summary Reports of Required Monitoring. [PCC 17.12.180.A.5.a.]

- a. The Permittee shall submit semiannual summary reports of the following monitoring and/or recordkeeping requirements:

- (1) Records of the occurrence and duration of any startup, shutdown, or malfunction for either of the two gas turbines.
  - (2) Total hours of operation by month for each of the gasoline engines identified in I.B.5 of this Part.
  - (3) Total hours of operation by month for each of the four boilers listed in I.C.2.b, c, d, and e.
  - (4) Total weight of material charged in the incinerator.
  - (5) Results of any performance tests conducted during the reporting period.
- b. Summary reports shall be due by January 31st (covering the period July 1st through December 31st) and July 31st (covering the period January 1st through June 30th) of each year. The first summary report due after permit issuance may not cover a 6-month period. All instances of excess emissions and deviations from permit requirements as defined in Part "A", Section XI shall be clearly identified in such reports.
3. Compliance Certification Reporting. [PCC 17.12.210.A.2.]
- a. The Permittee shall submit semiannual compliance certifications to the Control Officer and to EPA Region IX. The Compliance Certification Reports are due by January 31st and July 31st of each year. The first report due after permit issuance may not cover a 6-month period. (See Part "A", Section VII for detailed information on this report).
  - b. For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in 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 requirements if the appropriate performance or compliance test or procedure had been performed. (applicable to the gas turbines only) [40 CFR §60.11(g)]
4. Emissions Inventory Reporting. Every source subject to a permit requirement shall complete and submit an annual emissions inventory questionnaire when requested by the control officer. (See Part "A", Section VI for additional information on this report). [PCC 17.12.320.]

#### IV. TESTING REQUIREMENTS.

##### A. Gas Turbines.

1. Initial Testing for Nitrogen Oxides (NO<sub>x</sub>).

- a. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the Permittee shall conduct performance test(s) to monitor compliance with the NO<sub>x</sub> standard at I.B of this Part and furnish the Administrator a written report of the results of such performance test(s). [40 CFR Part 60, §60.8(a)]
- b. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act. [40 CFR Part 60, §60.8(b)]
- c. Conditions of Performance Testing
- (1) Performance tests shall be conducted under such conditions as the control officer shall specify to the plant operator based on representative performance of the affected facility. The Permittee shall make available to the control officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR Part 60, §60.8(c)]
- (2) The Permittee shall submit a test plan to the control officer for approval at least 14 days prior to the test. The control officer shall specify those conditions under which the test shall be conducted. The control officer may reject any test results that were derived from tests for which a test plan was not approved by the control officer. [PCC 17.12.050.C.]
- d. The Permittee shall provide the control officer at least 14 days prior notice of any performance test to afford the control officer the opportunity to have an observer present. If after 14 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the control officer as soon

as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the control officer by mutual agreement. [40 CFR Part 60, §60.8(d) and PCC 17.12.050.D.]

e. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

[40 CFR Part 60, §60.8(e)]

- (1) Sampling ports adequate for test methods applicable to such facility. This includes (a) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (b) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
- (2) Safe sampling platform(s).
- (3) Safe access to sampling platform(s).
- (4) Utilities for sampling and testing equipment.

f. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs. [40 CFR Part 60, §60.8(f)]

g. To compute the nitrogen oxides emissions, the Permittee shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired. [40 CFR Part 60, §60.335(a)] Since pipeline quality natural gas will be the only fuel allowed to be combusted in the gas turbines, the nitrogen content of the fuel may be assumed to be below 0.015% by weight.

h. In conducting the performance tests required in IV.A.1, the Permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in 40 CFR Part 60, §60.335 except as provided for in 40 CFR Part 60, §60.8(b). Acceptable alternative methods and procedures follow: [40 CFR Part 60, §335(b) and (f)]

Instead of using the equation in 40 CFR Part 60, §60.335(c)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR Part 60, §60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator before the initial performance test. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[40 CFR Part 60, §60.335(b)]

i. The owner or operator shall determine compliance with the nitrogen oxides standard in I.B. of this Part as follows: [40 CFR Part 60, §60.335(c)]

(1) The nitrogen oxides emission rate (NO<sub>x</sub>) shall be computed for each run using the equation found in 40 CFR Part 60, §60.335(c)(1).

(2) Method 20 shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO<sub>x</sub> emissions shall be determined at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

(3) If the Permittee uses a monitoring device to determine fuel consumption and water-to-fuel ratio, that device shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the NO<sub>x</sub> standards at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

2. Initial Test for Carbon Monoxide (CO). [PCC 17.20.010.B]

a. Within 60 days after achieving the maximum production rate at which each gas turbine will be operated, but not later than 180 days after initial startup of the turbines and at such other times as may be required by the Control Officer, the Permittee shall conduct performance test(s) to determine the carbon monoxide emission rate (pounds per hour and pounds per million cubic feet of gas combusted) and furnish the Control Officer a written report of the results of such performance test(s).

b. In conducting the initial tests for CO, the Permittee shall use EPA Test Method 10 (40 CFR 60, Appendix A) to determine CO concentrations.

- c. The Permittee shall conduct the performance tests in accordance with the provisions of Part A, Section XVII, and under such conditions as the Control Officer specifies to the Permittee based on the representative performance of the source. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions of performance tests.
- d. The Permittee shall provide the Control Officer two weeks prior notice of the performance test to afford the Control officer the opportunity to have an observer present.

3. Periodic Tests for NO<sub>x</sub> and CO. [PCC 17.20.010.B]

- a. The Control Officer shall require the Permittee to retest the gas turbines for both NO<sub>x</sub> and CO if the Control Officer determines in writing that all of the following conditions are met:
  - (1) The actual or potential emissions of air pollutants may adversely affect public health or the environment, and,
  - (2) An adequate scientific basis for the test method exists, and,
  - (3) The testing is technically feasible for the subject contaminant and source, and,
  - (4) The test method is reasonably accurate, and,
  - (5) The cost of the test is reasonable in light of the use to be made of the data.
- b. Before requiring such periodic testing, the Control Officer shall consider the relative cost and accuracy of any alternatives which may be reasonable under the circumstances such as emission factors, modeling, mass balance analysis, or emissions projections.

4. The Permittee shall determine compliance with the sulfur content standard in I.A.5 of this Part as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Control Officer.

B. Stationary Rotating Machinery. [PCC 17.16.340.K]

- 1. To determine compliance with the standards prescribed in I.B of this Part, the following reference methods shall be used:

- a. Reference Method 20 in 40 CFR 60, Appendix A for the concentration of sulfur dioxide and oxygen.
  - b. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
  - c. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.
2. To determine the sulfur content of the fuel being fired for purposes of the reporting requirement in III.B.4 of this Part, the following reference methods in the Arizona Testing Manual shall be used:
- a. ASTM Method D-129-91 (Test Method for Sulfur in Petroleum Products) (General Bomb Method) for the sulfur content of liquid fuels.
  - b. ASTM Method D-1072-90 (Test Method for Total Sulfur in Fuel Gases) for the sulfur content of gaseous fuels.
3. Mass emission testing to determine compliance with the particulate matter standard in I.B.1 of this Part is not normally necessary as standard emission factors for generators yield emission estimates of particulate matter that are far less than the standard allowed by the referenced equations. The Control Officer may require the Permittee to quantify its particulate matter emissions if the Control Officer has reasonable cause to believe a violation of a standard has occurred. [PCC 17.20.010]
4. EPA Test Method 9 may be used to monitor compliance with the opacity standard at I.B.2. [PCC 17.20.010]

C. Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment.

1. Initial Testing. [PCC 17.12.050.A and 17.20.010]
  - a. Within 60 days after achieving the maximum production rate at which each boiler identified in I.C.2 of this Part will be operated, but not later than 180 days after initial startup of the boilers and at such other times as may be required by the Control Officer, the Permittee shall conduct performance test(s) to determine nitrogen oxides and carbon monoxide emission rates (pounds per hour and pounds per million cubic feet of gas combusted) and furnish the Control Officer a written report of the results of such performance test(s).
  - b. In conducting the initial tests for NO<sub>x</sub> and CO, the Permittee shall use EPA Test Method 7 (40 CFR 60, Appendix A) to determine NO<sub>x</sub> concentrations and EPA Test Method 10 (40 CFR 60, Appendix A) to determine CO concentrations.

- c. The Permittee shall conduct the performance tests in accordance with the provisions of Part A, Section XVII, and under such conditions as the Control Officer specifies to the Permittee based on the representative performance of the source. The Permittee shall make available to the Control Officer such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions of performance tests.
  - d. The Permittee shall provide the Control Officer two weeks prior notice of the performance test to afford the Control officer the opportunity to have an observer present.
- 2. The Permittee shall use the applicable reference methods given in the Appendices to 40 CFR 60 to determine compliance with the standards as prescribed in I.C of this Part. All tests shall be run at the heat input calculated as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined according to ASTM Method D-3176-89, (Practice for Ultimate Analysis of Coal and Coke) and ASTM Method D-2015-91, (Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter).

[PCC 17.12.040 and 17.16.160.J]
- 3. Mass emission testing to determine compliance with the particulate matter standard in I.B.1 of this Part is not normally necessary as standard emission factors for generators yield emission estimates of particulate matter that are far less than the standard allowed by the referenced equations. The Control Officer may require the Permittee to quantify its particulate matter emissions if the Control Officer has reasonable cause to believe a violation of a standard has occurred.

[PCC 17.20.010]
- 4. Periodic Testing. 

[PCC 17.20.010.B]

  - a. The Control Officer shall require the Permittee to retest the boilers for both NO<sub>x</sub> and CO if the Control Officer determines in writing that all of the following conditions are met:
    - (1) The actual or potential emissions of air pollutants may adversely affect public health or the environment, and,
    - (2) An adequate scientific basis for the test method exists, and,
    - (3) The testing is technically feasible for the subject contaminant and source, and,
    - (4) The test method is reasonable accurate, and,
    - (5) The cost of the test is reasonable in light of the use to be made of the data.

- b. Before requiring such periodic testing, the Control Officer shall consider the relative cost and accuracy of any alternatives which may be reasonable under the circumstances such as emission factors, modeling, mass balance analysis, or emissions projections.

D. Incinerator.

1. The incinerator shall be tested for compliance with the mass emission limit in I.E.5 of this Part at least once during the permit term. [PCC 17.12.180.A.3]
2. The reference methods in 40 CFR 60, Appendix A, shall be used to determine compliance with the mass emission standard as follows: [PCC 17.16.170.G.1]
  - a. Method 4 and 5 for the concentration of particulate matter and the associated moisture content;
  - b. Method 1 for sample and velocity traverses;
  - c. Method 2 for velocity and volumetric flow rate;
  - d. Method 3 for gas analysis and calculation of excess air, using the integrated sampling technique.
3. For Method 5, the sampling time for each run shall be at least 60 minutes and the minimum sample volume shall be 0.85 dscm (30.0 dscf) except that smaller sampling times or sample volumes, when necessitated by process variables or other factors, may be approved by the Control Officer. [PCC 17.16.170.G.2]
4. EPA Test Method 9 may be used to monitor compliance with the opacity standard at I.E.2. [PCC 17.20.010]

- E. Cooling Towers. Upon request of the Control Officer, the Permittee shall conduct a cooling water sample analysis of the water in a cooling tower and provide the results of that analysis to the Control Officer. The water sample analysis shall be conducted in accordance with Method 7196, Chromium, Hexavalent (Colorimetric), contained in the Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, (November 1986) and its Revision I, (December 1987); or Method 3500-Cr D, Colorimetric Method, contained in the 18th Edition of "Standard Methods for the Examination of Water and Wastewater" (1992). [PCC 17.12.180.A.3 and 17.20.010.A]

Part "C": APPLICABLE REGULATIONS  
Air Quality Control Permit Number 2371  
For  
University of Arizona

**REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE**

Compliance with the terms and conditions contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

Code of Federal Regulations, Title 40

40 CFR Part 60 Subpart A	General Provisions (§§60.7(a)(1), 60.7(a)(3), 60.7(a)(4), 60.7(b), 60.7(f), 60.7(f)(3), 60.8(a), 60.8(b), 60.8(c), 60.8(d), 60.8(e), 60.8(f), 60.11(d), 60.11(g), 60.12, and 60.15)
40 CFR Part 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (§§60.48c(a) and 60.48c(a)(3))
40 CFR Part 60 Subpart GG	Standards of Performance for Stationary Gas Turbines (§§60.330(a), 60.330(b), 60.332(a)(1), 60.333(b), 60.335(a), 60.335(b), 60.335(c), 60.335(c)(1), and 60.335(f))
40 CFR Part 82 Subpart F	Protection of Stratospheric Ozone - Recycling and Emissions Reduction

Pima County SIP:

Rule 224	Fugitive Dust Producing Activities
Rule 313	Incinerators
Rule 314	Petroleum Liquids
Rule 316	Particulates Materials (Subsections A, C, D)
Rule 321	Emissions Discharge Opacity Limiting Standards - Standards and Applicability (Includes NESHAP)
Rule 332	Compilation of Mass Rates and Concentrations (NESHAPS)
Rule 343	Visibility Limiting Standard

Compliance with the terms contained in this permit shall be deemed compliance with the following non-federally applicable requirements in effect on the date of permit issuance:

Pima County Code (PCC) Title 17:

17.12.180	Permit Contents
17.12.190	Permits Containing Voluntarily Accepted Emission Limits and Standards
17.16.040	Visible Emission Standards - Standards and Applicability (Includes NESHAP)
17.16.050	Visibility Limiting Standard
17.16.110	Storage Piles
17.16.160	Standards of Performance for Fossil-Fuel Fired Steam Generators and General Fuel Burning Equipment
17.16.170	Incinerators
17.16.230	Standards of Performance for Storage Vessels for Petroleum Liquids
17.16.340	Standards of Performance for Stationary Rotating Machinery
17.16.400	Organic Solvents and Other Organic Materials (Sections A and C)
17.16.510	Standards of Performance for Incinerators
17.16.530	National Emissions Standards for Hazardous Air Pollutants

Part "D": EQUIPMENT LIST  
 Air Quality Control Permit Number 2371  
 University of Arizona

The Unit I.D. designation contains the building number and an emitting identifier. The last four digits of the Unit I.D. comprise the emitting identifier. The remaining digits identify the building number. As an example, Unit I.D. 580103 would be interpreted as emitting unit 0103 in building 58.

Unit I.D.	Description	Capacity	Serial Number	Model	Manufactured or Modified
20101	M.K. Goodkin Paint Spray Booth	NA	NA	2090-01	1991
20106	Takach-Garfield Etching Press	NA	NA	NA	1994
20109	Graymills Degreasing Tank	4 Gal	E-83	PL36-A	1993
20110	Paint Spray Booth	NA	NA	NA	NA
20204	Tachi-Garfield Lithography Press	NA	NA	NA	1970
20205	Griffen Press	NA	NA	NA	1985
20805	Kohler Emergency Generator	30kw	293726	30R82	NA
290101	Emergency Generator	10kw	NA	NA	NA
40105	Kohler Emergency Generator	55kw	289529	50R0ZJ71	NA
50109	Kohler Emergency Generator	10kw	62606	10RM82	NA
70105	Kohler Emergency Generator	8kw	3152386	09428-5	NA
80101	Kohler Emergency Generator	10kw	55653	10RM82	NA
100111	Kohler Emergency Generator	10kw	55675	10RM82	NA
170001	Alto Promax 3004 Pressure Washer	11hp	20005389	NA	NA
170002	Alto SHW 2030 Pressure Washer	5.5 hp	20006820	NA	NA
170210	Cooling Tower	NA	NA	NA	NA
170301	Xerox Copier	NA	NA	5100	1995
170302	Xerox Copier	NA	NA	5385	1995
170303	Xerox Copier	NA	NA	5388	1995
170304	Xerox Copier	NA	NA	5365	1997
170608	Emergency Generator	205kw	NA	NA	NA
200106	Cooling Tower	NA	NA	NA	1961
300102	JAPO Co. Autodrier	NA	2278	NA	1977
310111	Kohler Emergency Generator	10kw	62108	10RM82	NA
340101	Kohler Emergency Generator	10kw	60760	10RM82	NA
370101	Kohler Emergency Generator	170kw	354006	170R82	NA
440001	Emergency Generator	1040kw	To Be Supplied	G3516LE	NA
410202	Safety Kleen Degreasing Unit	25 gal	NA	NA	1995
420108	Water Heater	1400000Btu	NA	NA	NA
43A0401	Emergency	100kw	NA	NA	NA

Unit I.D.	Description	Capacity	Serial Number	Model	Manufactured or Modified
	Generator				
440110	Lincoln DC Arc Welder	46hp	NA	200g	2004
440113	Lincoln DC Arc Welder	10hp	NA	200m	1985
440114	DC Arc Welder With Gasoline Engine	10hp	NA	NA	NA
440115	DC Arc Welder With Gasoline Engine	30hp	NA	NA	NA
Spare 1	Kohler Emergency Generator	50 kw	284286	2588320100	2002
460108	Marley Cooling Tower #8	NA	668-12-2573	NA	1973
460109	Marley Cooling Tower #7	NA	NA	NA	1972
460110	Hoffman Cooling Tower#4	NA	SF10995	NA	1974
460111	BAC Cooling Towers #1,2,&3	NA	6780-82	4471-3	1982
460204	Kohler Emergency Generator	50kw	436724	55R82	NA
460303	Boiler	59520000Btu	NA	NA	NA
460304	Boiler	59520000Btu	NA	NA	NA
460305	Boiler	67500000Btu	NA	NA	NA
460306	Gas Turbine	7MW	NA	NA	NA
470601	Industrial Plus Pump	8hp	NA	NA	1996
500103	Kohler Emergency Generator	20kw	62077	20R82	NA
520106	Kohler Emergency Generator	20kw	62074	20R82	NA
540101	Kohler Emergency Generator	15kw	330317	15R82	NA
550101	Kohler Emergency Generator	110kw	435510	115R72	1975
550102	Kohler Emergency Generator	250kw	413893	250R72	1975
Spare 4	Emergency Generator	450kw	2681156411	G398	NA
580001	Emergency Generator	450kw	168156412	G398	NA
580101	Multilith 1250 Printing Press	NA	275526	1250	1975
580102	Multilith 1250 Printing Press	NA	325091	1250	1977
580103	Multilith 1250 Printing Press	NA	325092	1250	1977
580105	ABDick Printing Press	NA	885826	9850	1986
580111	Canon CLC 500 Printing Press	NA	NA	CLC 500	1989
580206	ITEK Processor	NA	6768	430	1968
580207	Magna Craft Printing Press	NA	NA	1530	1995
580208	Xerox Copier	NA	NA	Docutech	1992
580209	Xerox Copier	NA	NA	1090	1992
58A0113	Emergency	150kw	NA	NA	NA

Unit I.D.	Description	Capacity	Serial Number	Model	Manufactured or Modified
	Generator				
590110	Kohler Emergency Generator	30kw	59240	30RZ82	NA
630004	Emergency Generator	70kw	2076801	3991750200	NA
630101	Kodak Processor	NA	NA	M6 RP	1970
630103	Emergency Generator	50kw	345024	55RN82	1972
650304	Generac Emergency Generator	20kw	2000390	91A03104-S	NA
670111	Kohler Emergency Generator	45kw	272394	45R82	NA
680108	Kohler Emergency Generator	100kw	A000044019	GGHD-3385225	NA
690101	Kohler Emergency Generator	30kw	305544	30R82	NA
700101	Emergency Generator	280kw	NA	NA	NA
720306	Graymills Degreasing Unit	25 gal	NA	Cleanomaatic	1975
730103	Kohler Emergency Generator	20kw	287912	20R2	NA
730104	Kohler Emergency Generator	450kw	D8900223250	KTTA10GS1	NA
760101	Caterpillar Emergency Generator	155kw	66D39660	SR43306	NA
770101	Cummins Emergency Generator	250kw	PAP506761275	116JJW	1986
770501	Blue Print Machine	NA	DB017	Blu-Ray	1988
770604	Curing Oven	NA	NA	NA	1970
790104	Kohler Emergency Generator	30kw	58696	30RZ82	NA
830107	Kohler Emergency Generator	30kw	59243	30RZ82	NA
830108	Bryant Boiler	1,650,000 Btu	3R39338	244-23	1963
830109	National Boiler	2,750,000 Btu	2882	12-66	1962
850105	Parker Boiler	3,000,000Btu	38510	WH3000	1990
850106	Kohler Emergency Generator	15kw	268449	15R82	NA
880002	Generac Emergency Generator	100kw	2069026	2588320100	2002
880104	Kohler Emergency Generator	45kw	308023	45R82	NA
890101	Kohler Emergency Generator	15kw	292617	15RM82	NA
910103	Aliss-Chalmers Spray Paint Booth	NA	813076	276	1970
920207	Cummins Emergency Generator	100kw	375242	UC1274D14	NA
930101	Bryant Boiler	2100000Btu	13R10297	245-29	NA
940001	Emergency Generator	185	30647-1	GTA855G1	NA
940405	Kohler Emergency Generator	45kw	301350	45R82	NA
950001	Emergency	250	207723	EDI250NLC	NA

Unit I.D.	Description	Capacity	Serial Number	Model	Manufactured or Modified
	Generator				
960101	Kohler Emergency Generator	170kw	339847	170R72	1973
96P0101	Water Heater	1,000,000Btu	NA	NA	NA
96P0102	Water Heater	1,000,000Btu	NA	NA	NA
96P0103	Water Heater	1,000,000Btu	NA	NA	NA
96P0104	Water Heater	1,000,000Btu	NA	NA	NA
96P0105	Water Heater	1,000,000Btu	NA	NA	NA
460A0001	Graymills Solvent Degreaser	30 gal	B-94	PL423-A	1987
1000101	Emergency Generator	35kw	NA	NA	NA
1010102	International Incinerator	800,000Btu	89225	300CA	1989
1010103	Caterpillar Emergency Generator	275kw	H00351	SR4-3406	NA
1030111	Kohler Emergency Generator	50kw	222084	50R0Z271	NA
1040206	Onan Emergency Generator	125kw	H850774146	1250DVD15R	NA
1060101	Caterpillar Emergency Generator	300kw	4RG00521	3406B	NA
1060102	Cooling Towers (2)	NA	NA	NA	1991
1070101	Katolite Emergency Generator	500kw	XJ3801465	D500FRY4	NA
1080106	Katolite Emergency Generator	300kw	WK3726615	D300FRZ4	NA
1080201	Parker Boiler	1,730,000Btu	NA	T1730R	1999
1080202	Parker Boiler	1,730,000Btu	NA	T1730R	1999
1130103	Cooling Tower	NA	NA	NA	NA
1130301	Kohler Emergency Generator	275kw	NA	NA	NA
1170201	Kohler Emergency Generator	33kw	262596	30R0ZJ71	NA
1170301	Parker Boiler	2,650,000Btu	490605	WH2650	1998
1170302	Parker Boiler	2,650,000Btu	490604	WH2650	1998
1170303	Parker Boiler	2,400,000Btu	49549	WH3000	1998
1170304	Parker Boiler	2,400,000Btu	49550	WH3000	1998
1170305	Parker Boiler	2,400,000Btu	49548	WH1410	1998
1180101	Emergency Generator	60kw	NA	NA	NA
1190103	Safety Kleen Solvent Degreaser	15 gal	NA	NA	1991
1190205	Rosco Fog Machine	NA	NA	4500	1994
1190206	Emergency Generator	375kw	NA	NA	NA
1200101	Emergency Generator	200kw	NA	NA	NA
1510102	Parker Boiler	1210000Btu	32567	WH1210	1986
1580000	Emergency Generator	250kw	K6005	250R0ZD71	NA
1580001	Kohler Emergency Generator	250kw	364350	250ROZD71	1996
Spare 3	Kohler Emergency Generator	15kw	297659	15RM82	1977
Spare 2	Olympian	200kw	OLYOOOOLN	DP00P4	NA

Unit I.D.	Description	Capacity	Serial Number	Model	Manufactured or Modified
	Emergency Generator		N		
1740101	Emergency Generator	38.2kw	8200371	DCA45USI	NA
1740104	Cooling Towers (2)	NA	NA	NA	NA
1760101	Parker Boiler	2160000Btu	NA	T2160R	1999
1760102	Kohler Emergency Generator	100kw	11459	100RHOZ77	NA
180B0002	Emergency Generator	150kw	C040615971	GGKD-5668125	NA
1810001	Emergency Generator	85kw	F020381388	GGHG-5563083	NA
1820001	Emergency Generator	85kw	K020435538	GGHG-5585111	NA
2010302	Marley Cooling Tower	NA	1825-2210-91	Quadra Flow	1993
2010406	Emergency Generator	310kw	NA	NA	NA
2020001	Emergency Generator	100kw	To Be Supplied	To Be Supplied	NA
2040105	Johnson & Johnson Sterilizer	1 gal	NA	2016	NA
2050201	Cooling Tower	11,900 gal	NA	NA	NA
2050202	Cooling Tower	11,900 gal	NA	NA	NA
2050203	Cooling Tower	11,900 gal	NA	NA	NA
2050204	Cooling Tower	13,100 gal	NA	NA	NA
2050205	Cooling Tower	17,000 gal	NA	NA	NA
2050206	Cooling Tower	16,700 gal	NA	NA	NA
2050207	Emergency Generator	450kw	NA	NA	NA
2050208	Boiler	42,200,000 Btu	NA	NA	NA
2050209	Boiler	42,200,000 Btu	NA	NA	NA
2050301	Gas Turbine	5MW	NA	NA	NA
2070101	Caterpillar Emergency Generator	260kw	48BH5223	3406SR4	NA
2210104	TCM Cooling Towers (2)	NA	QF068&69	FT420	1989
2210105	Kohler Emergency Generator	600kw	252273	600ROZ71	NA
2220105	Emergency Generator	515kw	NA	NA	NA
2400001	Emergency Generator	1040kw	To Be Supplied	G3516LE	NA
2400002	Emergency Generator	1040kw	To Be Supplied	G3516LE	NA
2410001	Emergency Generator	1040kw	To Be Supplied	G3516LE	NA
200003	Raku Kiln	8ft <sup>3</sup>	NA	NA	1990
200007	Paint Spray Booth	26ft <sup>3</sup>	NA	NA	1990
5590101	National Boiler	1,000,000Btu	NA	566	1961
170003	NorthStar Gas Powered Hot Water Pressure Washer	16hp	NA	NA	2005
4680001	Emergency Generator	10 kw	0634522	8.5 RMY	NA

Part "E": INSIGNIFICANT EQUIPMENT LIST

Air Quality Control Permit Number 2371  
University of Arizona

Approximately 128 natural gas-fired residential furnaces, heat pumps, small heaters, and kilns located in different buildings at the University. (Approximately 12,000 Btu/ hr – 750,000 Btu/ hr).

Approximately 44 small natural gas-fired boilers and water heaters located in different buildings at the University. (Approximately 21,500 Btu/hr – < 1,000,000 Btu/hr)

Approximately 125 small painting, coating, photography, and printing activities.

