

Exhibit 1

Ocotillo Power Plant, PSD Permit (March 23, 2016)



AIR QUALITY DEPARTMENT
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**PSD, NSR, and TITLE V AIR QUALITY CONSTRUCTION
AND OPERATING PERMIT**

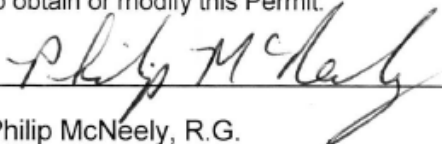
Title V Permit Number:	V95-007	Original Issue Date:	July 27, 2000
Revision Number:	2.1.0.0	Revision Date:	March 22, 2016
PSD Permit Number:	PSD16-01	Title V Expiration Date:	December 31, 2020

Permittee Name: Arizona Public Service
Mailing Address: 400 North 5th Street, Phoenix, AZ 85004
Business Name: Ocotillo Power Plant
Facility Address: 1500 East University Drive, Tempe, AZ 85281

Equipment and Processes Covered: The facility will consist of five new and two older natural gas simple cycle turbines and related equipment. The facility requires a Title V permit because it exceeds the 100 ton per year major source threshold for NO_x and CO.

This Permit is issued in accordance with Maricopa County Air Pollution Control Regulations, Rule 200, §301, and Arizona Revised Statutes, §49-404c and §49-480. The attached Permit Conditions are incorporated into and form an integral part of this Permit. The Permit is issued to provide regulators, site operators or owners, and members of the public, a clear picture of what the Permit holder is required to do to meet applicable requirements. As the Permit holder, you are expected to review this Permit, become familiar with its provisions and conditions and to operate in conformance with them. This Permit is an enforceable document. Failure to conform to the emission limits and any other condition contained in the Permit is a violation of law and will form the basis of enforcement action by the department which may include civil or criminal sanctions.

If the MCAQD Control Officer determines that additional monitoring, sampling, modeling and/or control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and/or welfare, the MCAQD Control Officer will amend the provisions of this Permit. This Permit may be subject to suspension or revocation for cause including nonpayment of fees, noncompliance with Arizona State Statutes, Maricopa County Air Quality Regulations, or the attached Permit Conditions, or if the MCAQD Control Officer determines that significant misrepresentation exists in the application and supporting documentation filed to obtain or modify this Permit.


Philip McNeely, R.G.

Maricopa County Air Pollution Control Officer

COMMON ABBREVIATIONS

Act	Federal Clean Air Act
AAAC.....	Acute Ambient Air Concentration
AAC.....	Arizona Administrative Code
ADEQ.....	Arizona Department of Environmental Quality
AIRS	Aerometric Information Retrieval System
ARS	Arizona Revised Statutes
AZMACT	Arizona Maximum Achievable Control Technology
ASTM.....	American Society of Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal unit
CAA.....	Clean Air Act
CAAC	Chronic Ambient Air Concentration
CAS	Chemical Abstract Service
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic feet
ECS.....	Emission Control System
EPA	US Environmental Protection Agency
HAP	Hazardous Air Pollutant
ID.....	Identification number
MACT	Maximum Achievable Control Technology
MCAQD.....	Maricopa County Air Quality Department
NA	Not applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMHC.....	Non-methane hydrocarbon
NO _x	Nitrogen oxides
NSPS	New Source Performance Standards
O ₂	Oxygen
O&M	Operation and maintenance
Pb.....	Lead
PM	Particulate matter
PM _{2.5}	Particulate matter less than 2.5 microns in size
PM ₁₀	Particulate matter less than 10 microns in size
ppm.....	Parts per million
psia.....	pounds per square inch, actual
RACT	Reasonably Available Control Technology
RVP	Reid Vapor Pressure
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
VE.....	Visible Emissions
VOC.....	Volatile Organic Compounds

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Date Issued: 07/27/2000
Revision: 2.1.0.0
Revision Date: 03/22/2016
Expiration Date: 12/31/2020

In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 §302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

GENERAL CONDITIONS:

1. AIR POLLUTION PROHIBITED:

The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or SIP Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).

[Rule 100 §301] [SIP Rule 3]

2. CIRCUMVENTION:

The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.

[Rule 100 §104]

3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:

- a. **CERTIFICATION REQUIRED:** Any application form, report, or compliance certification submitted under County or Federal Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under County or Federal Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- b. **PERMIT APPLICATION RELIED UPON:** The Permit Conditions contained herein are substantially based on information contained in the certified application submitted by the Permittee and all subsequent submittals. The information contained in such submittals was relied upon as being truthful, accurate, and complete for development of this Permit.

[Rule 100 §401] [Rule 210 §§301.7 & 305.1(e)]

4. COMPLIANCE:

a. COMPLIANCE REQUIRED:

- i. The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and

conditions does not relieve, modify, or otherwise affect the Permittee’s duty to comply with all applicable requirements of Arizona air quality statutes and the Maricopa County Air Pollution Control Regulations. Any permit noncompliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only.]

[Rule 210 §§301.8(b)(4) & 302.1(h)(1)]

- ii. The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only.]

[Rule 210 §302.1(h)(2)]

- iii. For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in Rule 100.

[Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.2]

- iv. For any major source operating in a nonattainment area designated as serious for PM₁₀, for which the source is classified as a major source for PM₁₀, the source shall comply with the best available control technology (BACT), as defined in Rule 100 for PM₁₀.

[Rule 210 §302.1(h)(7)]

b. COMPLIANCE CERTIFICATION REQUIREMENTS:

The Permittee shall file an annual or semiannual Compliance Certification, as specified in the Specific Conditions section of this Permit, with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices and shall be submitted at such times as required by the Specific Conditions of this Permit. The Compliance Certification shall be on a form supplied or approved by the Control Officer and shall include the following:

- i. The identification of each term or condition of the permit that is the basis of the certification;
- ii. The compliance status;
- iii. Whether compliance was continuous or intermittent;
- iv. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- v. Other facts as the Control Officer may require to determine the compliance status of the source.

The annual or semiannual, as required in the Specific Conditions Section of this permit, Monitoring Report and Compliance Certification shall be filed according to the schedule provided in the Specific Conditions section of this Permit.

[Rule 210 §305.1(d)]

c. COMPLIANCE PLAN:

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the first date of public notice of the proposed conditions for this Permit unless a Compliance Plan is included in the Specific Conditions of this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only.]

[Rule 210 §305.1(g)]

5. CONFIDENTIALITY CLAIMS:

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) that:

- a. Precisely identifies the information in the permit(s), records, or reports that is considered confidential, and
- b. Provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position. The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies these requirements.

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

If the Permittee submits information with an application under a claim of confidentiality pursuant to ARS §49-487 and Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[Rule 100 §402] [Rule 200 §411] [Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act, as well as the Acid Rain provisions required to be in all Title V permits.

a. ACID RAIN PROGRAM:

- i. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated pursuant to Title IV of the CAA and incorporated pursuant to Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- ii. The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds pursuant to Title IV of the CAA or the regulations promulgated thereunder and incorporated pursuant to Rule 371.
 - 1) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program and incorporated pursuant to Rule 371, provided that such increases do not require a permit revision pursuant to any other applicable requirement.
 - 2) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - 3) Any such allowance shall be accounted for according to the procedures established in regulations promulgated pursuant to Title IV of the CAA.
 - 4) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit pursuant to Rule 371:
 - a) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - b) Exceedances of applicable emission rates.
 - c) The use of any allowance prior to the year for which it was allocated.

d) Violation of any other provision of the Permit.
 [Rule 210 §§302.1(b)(2) & 302.1(f)] [Rule 371 §301]

b. ASBESTOS:

The Permittee shall comply with the applicable requirements of 40 CFR 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and Rule 370 for all demolition and renovation projects.

[40 CFR Part 61 Subpart M] [Rule 370 §301.8]

c. RISK MANAGEMENT PLAN (RMP):

Should this stationary source, as defined in 40 CFR §68.3, be subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

[40 CFR Part 68]

d. STRATOSPHERIC OZONE PROTECTION:

If applicable, the Permittee shall follow the requirements of 40 CFR §§82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- i. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.
- ii. Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.
- iii. Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.

If applicable, the Permittee shall follow the requirements of 40 CFR Part 82 Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

[40 CFR §82 Subparts E, F, and G]

7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION:

If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

[Rule 210 §301.6] [40 CFR §70.5(b)]

8. EMERGENCY EPISODES:

If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of Rule 600 §302.

[Rule 600 §302] [SIP Rule 600 §302]

9. EMERGENCY PROVISIONS:

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 this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[Rule 130 §201]

10. EXCESS EMISSIONS:

There are reporting requirements associated with excess emissions. These requirements are contained in Permit Condition 16.f in a subparagraph called Excess Emissions Reporting. The definition of excess emissions can be found in Rule 100 §200.

[Rule 140 §500] [SIP Rule 140]

11. FEES:

The Permittee shall pay fees to the Control Officer pursuant to ARS §49-480(D) and Rule 280.

[Rule 200 §409] [Rule 210 §§302.1(i) and §401] [SIP Rule 28]

12. MODELING:

Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the 40 CFR 51, Appendix W, "Guideline on Air Quality Models", as of July 1, 2004 (and no future amendments or additions), and is adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.

[40 CFR 51 App. W] [Rule 200 §407] [SIP Rule 26]

13. MONITORING AND TESTING:

a. **MONITORING REQUIRED:** The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with Rule 200 §310.

[Rule 200 §310] [SIP Rule 41]

b. **TESTING REQUIRED:** Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established pursuant to the County or SIP Rules or these Permit Conditions in accordance with Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[Rules 200 §408; 210 §302.1(c); and Rule 270 §§300 and 400] [SIP Rule 27]

c. **TESTING FACILITIES:** The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

- i. Sampling ports adequate for test methods applicable to such source.
- ii. Safe sampling platform(s).
- iii. Safe access to sampling platforms(s).
- iv. Utilities for sampling and testing equipment.

[Rule 270 §405] [SIP Rule 42]

14. PERMITS:

a. **BASIC:**

This 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.

[Rule 210 §302.1(h)(3)]

b. **PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:**

- i. The Permittee shall comply with the Administrative Requirements of Section 400 of Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit

revision including information listed in Rule 200 §309 and Rule 210 §301.

[Rule 200 §§301 & 309] [Rule 210 §§301 & 400]

- ii. The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator’s national database management system.

[Rule 210 §§303.1(a) & 303.2 & 405.4]

- iii. While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response. If, while processing an application that has been determined or deemed to be complete, the Control Officer determines that additional information is necessary to evaluate or to take final action on that application, the Control Officer may request such information in writing and may set a reasonable deadline for a response.

[Rule 210 §301.4(f)]

- iv. No permit revision shall be required pursuant to any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[Rule 210 §302.1(j)]

c. POSTING:

- i. The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[Rule 200 §312]

- ii. Any approved Dust Control Plan or Dust Control Permit required by Rule 310 shall be posted in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise be kept available on site at all times.

[Rule 310 §409] [SIP Rule 310 §401]

d. PROHIBITION ON PERMIT MODIFICATION:

The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

[Rule 200 §311]

e. RENEWAL:

- i. The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §309 and Rule 210 §§301 & 302.3.

[Rule 200 §309] [Rule 210 §§301 and 302]

- ii. The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.

[Rule 210 §301.4(f)]

- iii. If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application.

[Rule 200 §403.2] [Rule 210 §§301.4(f) and 301.9]

f. REVISION / REOPENING / REVOCATION:

- i. If the Permittee becomes subject to a standard promulgated by the Administrator under Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard was promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.
[Rule 210 §301.2(c)]
- ii. This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years and the facility is a major source. Such a 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 this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.
[Rule 200 §402.1(a)(1)]
- iii. Any permit revision required pursuant to this Permit Condition, 14.f.i, shall reopen the entire permit, shall comply with provisions in Rule 200 for permit renewal, and shall reset the five year permit term.
[Rule 200 §402.1(a)(1)] [Rule 210 §302.5]
- iv. This permit shall be reopened and revised under any of the following circumstances:
- 1) 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 Title V permit.
 - 2) 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.
 - 3) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.f.ii, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the Permit for which cause to reopen exists.

[Rule 200 §402.1]

- v. This permit shall be reopened by the Control Officer and any permit shall be revised when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.
[Rule 210 §407.3]
- vi. This 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.
[Rule 210 §302.1(h) (3)]

g. REQUIREMENTS FOR A PERMIT:

- i. Except as noted in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued under this rule. No source may operate after the time that it is required to submit a timely and complete application except as noted in Sections 403 and 405 of Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in Rule 210 §301.4, for permit issuance or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the

applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application.

[Rule 210 §301.9]

ii. If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction and revegetation, require a separate Dust Control Permit that must be obtained from the Control Officer before the activity may begin.

1) The Permittee shall not commence any routine dust-generating operation that disturbs a surface area of 0.10 acre or greater without first submitting a Dust Control Plan to the Control Officer.

[Rule 310 §§302.3 & 402.1] [SIP Rule 310 §303.1]

2) The Permittee shall request a Dust Control Plan revision with a submittal in the manner and form prescribed by the Control Officer if:

- a) The acreage of a project changes;
- b) The permit holder changes;
- c) The name(s), address(es), or phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation change; and
- d) If the activities related to the purposes for which the Dust Control permit was obtained change.

[Rule 310 §403.2]

3) A subcontractor who is engaged in dust-generating operations at a site that is subject to a Dust Control Permit shall register with the Control Officer and follow those registration requirements in Rule 200.

[Rule 200 §306] [SIP Rule 310 §302]

iii. Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in Rule 314 §303.

[Rule 314] [Rule 200 §307] [SIP Rule 314]

h. RIGHTS AND PRIVILEGES:

This Permit does not convey any property rights nor exclusive privilege of any sort.

[Rule 210 §302.1(h)(4)]

i. SEVERABILITY:

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

[Rule 210 §302.1(g)] [SIP Rule 80]

j. SCOPE:

The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[Rule 200 §309]

Nothing in this permit shall alter or affect the following:

- i. The provisions of Section 303 of the Act, including the authority of the Administrator pursuant to that section.
- ii. The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- iii. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.

- iv. The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee pursuant to Section 114 of the Act, or any provision of State law.
- v. The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued.

[Rule 210 §407.2]

k. TERM OF PERMIT:

This Permit shall remain in effect for no more than 5 years from the date of issuance. Terms of this Permit subject to preconstruction review under Prevention of Significant Deterioration(PSD) do not expire with the Title V terms and conditions, and may only be revised pursuant to 40 CFR §52.21.

[County Rule 210 §§302.1(a) and 402][40 CFR §52.21]

l. PSD AUTHORITY TO CONSTRUCT:

- i. APS is authorized to construct and operate the Project as described below, in accordance with the permit application (and plans submitted with the permit application), the federal PSD regulations at 40 CFR §52.21, and other terms and conditions set forth as part of the PSD permit – Permit PSD16-01. The PSD Permit shall consist of those permit conditions identified as being pursuant to Permit PSD16-01 and 40 CFR §52.21. Failure to comply with any condition or term set forth in this permit may result in enforcement action pursuant to section 113 of the CAA.

Install five new natural gas-fired GE Model LMS100 simple cycle gas turbines (GTs) and associated equipment, including a hybrid Partial Dry Cooling System and two 2.5 MW emergency generators. Retire the existing steam electric generating units 1 and 2 and associated cooling towers before commencing commercial operation of the new GTs. The existing GT1 and GT2 will no longer have dual-fuel capability and will only burn Pipeline Natural Gas.

- 1) As provided in 40 CFR §52.21(r), unless EPA grants an extension pursuant to 40 CFR §52.21(r)(2), the PSD permit shall become invalid if:
 - 2) Construction does not commence (as defined in 40 CFR §52.21(b)(9)) within 18 months after the permit becomes effective;
 - 3) Construction is discontinued for a period of 18 months or more; or
 - 4) Construction is not completed within a reasonable time.
- ii. Construction of equipment authorized by this permit shall be conducted and completed only in compliance with the conditions in Permit PSD16-01.
- iii. Within thirty (30) days following commencement of construction under PSD16-01 and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the effective date of the PSD permit, whichever is later, the permittee shall furnish to the County in writing, notification of the following:
 - 1) The date when construction commenced.
 - 2) The date of start-up of the affected facilities listed in this permit.
 - 3) The date when the maximum production rate specified in the permit application was achieved.
- iv. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to County Rule 200 §401. If compliance is not demonstrated within the prescribed timeframe provided in County Rule 240 §304.4, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of Maricopa County.
- v. Terms and conditions of Permit PSD16-01 shall not expire upon expiration of the title V permit,

and may only be revised pursuant to 40 CFR §52.21.

[County Rule 240 §304.4] [40 CFR §52.21(r)(2)]

m. **PERMIT EFFECTIVE DATE:**

The effective date of this permit shall be the day service of notice of the decision (permit issuance) occurs per 40 CFR §124.15(b), unless comments requesting a change in the draft permit were filed on the draft permit or were submitted in the public hearing. If comments requesting a change in the draft permit were filed or submitted in the public hearing, the effective date of this permit shall be thirty (30) days after the service of notice of the decision occurs per 40 CFR Part 124. Three (3) days shall be added to the noted dates if service of notice is by mail.

[40 CFR §§124.15, 124.19, and 124.20]

n. **TRANSFER:**

Except as provided in ARS §49-429 and Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days before the proposed transfer and complies with the permit transfer requirements of Rule 200 and the administrative permit amendment procedures pursuant to Rule 210.

[Rule 200 §404 (locally enforceable only)]

15. RECORDKEEPING:

a. **RECORDS REQUIRED:**

The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

[Rule 100 §501] [Rule 310 §502] [SIP Rule 40.A]

b. **RETENTION OF RECORDS:**

Unless a longer time frame is specified by the Rules or these Permit Conditions, the Permittee shall retain information and records required by either the Control Officer or these Permit Conditions as well as copies of summarizing reports recorded by the Permittee and submitted to the Control Officer for 5 years after the date on which the pertinent report is submitted.

[Rule 100 §504] [SIP Rule 40.C]

c. **MONITORING RECORDS:**

The Permittee shall retain records of all required monitoring data and support information for a period of at least five 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 or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit. Records of any monitoring required by this Permit shall include the following:

- i. The date, place as defined in the permit, and time of sampling or measurements;
- ii. The date(s) analyses were performed;
- iii. The company or entity that performed the analyses;
- iv. The analytical techniques or methods used;
- v. The results of such analyses; and
- vi. The operating conditions as existing at the time of sampling or measurement.

[Rule 210 §§302.1(d) and 305.1(b)]

d. **RIGHT OF INSPECTION OF RECORDS:**

When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of Rule 100 or any County Rule adopted under Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books,

records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

[Rule 100 §106] [SIP Rule 40.D]

16. REPORTING:

NOTE: See Permit Condition 15 in conjunction with reporting requirements.

a. ANNUAL EMISSION INVENTORY REPORT:

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30 or 90 days after the Control Officer makes the inventory forms available, whichever occurs later. The annual emissions inventory report shall be in the format provided by the Control Officer. The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under ARS §49-476.01, ARS §49-480.03 and Rule 372.

[Rule 100 §505]

b. DATA REPORTING:

When requested by the Control Officer, the Permittee shall furnish information to locate and classify air contaminant sources according to type, level, duration, frequency and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

[Rule 100 §502]

c. DEVIATION REPORTING:

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these permit conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard.

- i. For emissions of a hazardous air pollutant that continue for more than an hour in excess of permit requirements, the Permittee shall submit a report to the Control Officer by certified mail, facsimile, email or hand delivery within 24 hours of knowledge of deviation.
- ii. For emissions of any regulated air pollutant that continue for more than two hours in excess of permit requirements, the Permittee shall submit a report to the Control Officer by certified mail, facsimile, email or hand delivery within 48 hours of knowledge of the deviation.
- iii. All other deviations that do not result in an exceedance of any applicable emission limitation or standard shall be documented in the same manner, promptly logged in the facility records within 2 working days and included in the next semiannual monitoring report.

The report and documentation in the log shall contain a description of the probable cause of such deviations and any corrective actions or preventative measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements. All instances of deviations from the requirements of this Permit shall be clearly identified in the semiannual monitoring reports.

[Rule 210 §§302.1(e) & 305.1(c)] [SIP Rule 40] [40 CFR 71.6(a)(3)(iii)]

d. EMERGENCY REPORTING:

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency and submit notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 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 actions taken.

[Rule 130 §402.4 (locally enforceable only)]

e. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an annual emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions. At a minimum the emission statement shall contain all information required by the Consolidated Emissions Reporting Rule in 40 CFR Part 51, Subpart A, Appendix A, Table 2A. The statement shall contain emissions for the time period specified by the Control Officer. The statement shall also contain a certification by a responsible official of the company that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement.

[Rule 100 §503] [SIP Rule 100 §504]

f. EXCESS EMISSIONS REPORTING:

(NOTE: This reporting subsection is associated with the requirements listed in the section entitled "Excess Emissions".)

i. The Permittee shall report to the Control Officer any emissions in excess of the limits established either by the County or SIP Rules or these Permit Conditions. The report shall be in two parts as specified below:

- 1) Notification by e-mail, telephone, or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions. This notification shall include all available information listed in Permit Condition 16.f.ii.
- 2) A detailed written notification of an excess emissions report shall be submitted within 72 hours of the telephone notification in Permit Condition 16.f.i.1.

ii. The excess emissions report shall contain the following information:

- 1) The identity of each stack or other emission point where the excess emissions occurred.
- 2) 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.
- 3) The time and duration or expected duration of the excess emissions.
- 4) The identity of the equipment from which the excess emissions emanated.
- 5) The nature and cause of such emissions.
- 6) 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 such malfunction.
- 7) The steps that were or are being taken to limit the excess emissions.
- 8) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, the report shall contain a list of the steps taken to comply with the Permit procedures.

iii. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the Permittee 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 that meets the criteria of this Permit Condition.

[Rule 140 §500] [SIP Rule 140]

g. OTHER REPORTING:

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 this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality pursuant to Permit Condition 5.

[Rule 210 §302.1(h)(5)]

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

- a. The Control Officer during reasonable hours, for the purpose of enforcing and administering County or SIP Rules or the Clean Air Act, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.
- b. The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:
 - i. 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 pursuant to the conditions of the permit;
 - ii. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;
 - iii. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
 - iv. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
 - v. Record any inspection by use of written, electronic, magnetic, and photographic media.

[Rule 100 §105] [Rule 210 §305.1(f)] [SIP Rule 43]

SPECIFIC CONDITIONS:

Definitions: For the purpose of these conditions, the following definitions shall apply:

- 1) "TPY" shall be defined as "tons emitted in any rolling 12-month period, with a new 12-month period beginning on the first day of each calendar month."
- 2) "O&M Plan" shall be defined as the Operations and Maintenance Plan most recently approved either in writing by the Control Officer or by County Rule.
- 3) "Startup" Startup is defined as the period between when a unit is initially started and fuel combustion is indicated and ending 30 minutes later.
- 4) "Shutdown" is defined as the period beginning with the initiation of gas turbine shutdown sequence and lasting until fuel combustion has ceased.
- 5) "Startup or Shutdown Emission Limit" shall be effective for any clock hour in which startup or shutdown occurs.
- 6) "Pipeline Natural Gas" means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline Natural Gas contains 0.5 grains or less of total sulfur per 100 standard cubic feet. Additionally, Pipeline Natural Gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot.
- 7) "QA operating quarter" means a calendar quarter in which there are at least 168 unit operating hours or, for a common stack or bypass stack, a calendar quarter in which there are at least 168 stack operating hours (as defined in this section).
- 8) "Stack operating hour" means a clock hour during which flue gases flow through a particular stack or duct (either for the entire hour or for part of the hour) while the associated unit(s) are combusting fuel.
- 9) "SI ICE" spark ignition internal combustion engine.
- 10) "GTCT" gas turbine cooling tower.
- 11) "TDS" total dissolved solids
- 12) "EG" emergency generator

Note: The Unit 1 and Unit 2 Steam Boilers and the associated Cooling Towers 1 and 2 shall be permanently retired upon the commencement of operation of the first combustion turbines, GT3 – GT7, associated with this permit action. Permit Conditions related to emissions (other than opacity) and operational limits will not be in effect until the commencement of operation of the first combustion turbine.

- **12-month rolling totals will be determined based on fuel flow and emission rates determined during the initial performance testing.**
- **Short-term emission limits will not apply until the completion of the initial performance testing.**

18. ALLOWABLE EMISSION LIMITATIONS:

a. ALLOWABLE EMISSIONS FOR THE STEAM TURBINE UNITS & ALL GAS TURBINES:

Particulate matter limits:

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel burning equipment or stationary rotating machinery having a heat input rate of

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

where:

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

Q= the heat input in million Btu per hour.

[A.A.C. R18-2-703, 719, 724] [SIP Rule 31H]

b. FACILITY-WIDE ALLOWABLE EMISSIONS:

TABLE 1: Rolling 12-month Limits (tons per year).

Emissions Unit(s)	SO ₂	NO _x	CO	PM ₁₀	PM _{2.5}	VOC	CO _{2e}
GT3 - GT7	5.9	125.3	239.2	63.0	54.9	43.1	1,099,504
EG1 – EG2	0.02		10.8		0.62	0.83	1,969
GTCT	NA		NA		1.53	NA	NA
GT1 - GT2	NA		NA		NA	NA	NA

[County Rule 240 §308.1(a)] [40 CFR §52.21(j)] [County Rule 241 §301]

TABLE 2: Hourly Emission Limits for the new gas turbines GT3 - GT7 when turbines operate during periods other than startup/shutdown and tuning/testing mode, lb/hour, 1-hour average).

Emissions Unit(s)	SO ₂	NO _x	CO	PM ₁₀	PM _{2.5}	VOC	CO _{2e}
GT3-GT7 individually	0.6	9.3	13.5	5.4	5.4	2.6	NA
GTCT	NA	NA	NA	0.60	0.36	NA	NA

[County Rule 240 §308.1(a)] [40 CFR §52.21(j)] [County Rule 241 §301]

TABLE 3: Hourly emission limits for Units GT3 - GT7 during periods when gas turbines operate in startup/shutdown (lb/hour, 1-hour average).

	NO _x	CO
GT3-GT7	31.4	69.2

[County Rule 240 §308.1(a)] [40 CFR §52.21(j)] [County Rule 241 §301]

TABLE 4: Additional concentration or rate emission limits (per unit).

Emission Unit or Device	NO _x	CO	PM ₁₀ Total	PM _{2.5} Total	VOC	CO _{2e}	Other
GT3 - GT7 during Normal Operation Other than Startup/Shutdown or Tuning/Testing Mode	2.5 ppmdv at 15% O ₂ (1-hr average)	6.0 ppmdv at 15% O ₂ (1-hr average)	5.4 lbs/hr (1-hr average) (compliance based on average of 3 test runs)	5.4 lbs/hr (1-hr average)	2 ppmdv at 15% O ₂ (1-hr average)	1,460 lbs CO ₂ /MWh gross output, based on a 12-month rolling average.	Ammonia 10 ppmdv, Based on a 24-hour rolling average
New Cooling Tower	NA	NA	Drift eliminators limiting drift to 0.0005% and Total Dissolved Solids (TDS) content of circulating cooling water less than 8,000 ppm	Drift eliminators limiting drift to 0.0005% and Total Dissolved Solids (TDS) content of circulating cooling water less than 8,000 ppm	NA	NA	NA

[County Rule 240 §308.1(a)] [40 CFR §52.21(j)] [County Rule 241 §301]

The following notes and compliance methods apply to Tables 1 through 4:

- a) NA (Not Applicable) means that the device does not emit the indicated pollutant.
- b) The rolling 12- month limits shall be calculated monthly by the end of the following month using the data from the most recent 12 calendar months, with a new 12-month period beginning on the first day of each calendar month.
- c) NO_x emissions during all operations of GT3 through GT7 shall be calculated using CEMS data in accordance with 40 CFR Part 75, Appendix F.
- d) CO emissions from Units GT3 through GT7 shall be calculated from CEMS data.
- e) PM₁₀ and VOC emissions from Units GT3 through GT7 shall be calculated using monitored fuel flow and emission factors from the most recent performance test for each unit, unless an alternative emission factor can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.
- f) PM₁₀ and VOC emissions from GT1 and GT2 shall be calculated using monitored fuel flow and emission factors from the U.S. EPA document AP-42, unless an alternative emission factor can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.
- g) SO₂ emissions from all units shall be calculated from fuel usage during normal operations, startup/shutdown, and the sulfur content of the fuel as determined as specified in this permit.
- h) Unless otherwise stated, the PM₁₀ emission limits include both solid (filterable) and condensable particulate matter. Filterable PM₁₀ is measured with 40 CFR Part 60 Appendix A Method 5 or 201A. Condensable particulate matter is measured with 40 CFR 60 Appendix A Method 202.
- i) Emissions from the emergency generator will be calculated using recorded operating hours times the allowable Tier 2 emission rates time the nameplate capacity of the generators.

- c. 40 CFR Part 60 SUBPART KKKK EMISSION LIMITATIONS (Units G3 through G7):
 - i. Sulfur Dioxide (SO₂) Emission Limits:
 - 1) The Permittee shall limit emissions to 0.90 pounds per megawatt-hour gross output, or
 - 2) Not burn any fuel which contains emissions in excess of 0.060 lb SO₂/MMBtu heat input.
 - ii. Nitrogen Oxides (NO_x) Emission Limits:
 - 1) The NO_x emissions during normal operations shall not exceed 15 ppm at 15% O₂ or 0.43 lb/MWHr. (4-hour rolling average)

[40 CFR §60.4325]

- d. Offsite Sulfur Oxides limits:
 The Permittee shall not emit into the ambient air any sulfur oxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding those limits shown in Table 5:

Table 5: Sulfur Dioxide Ambient Concentration Limits

Concentration of Sulfur Dioxide (µg/cubic m)	Averaging Time (hours)
850	1
250	24
120	72

[SIP Rule 32 F]

- e. COOLING TOWER PM₁₀ CALCULATIONS:
 Cooling tower PM emissions are calculated based on the circulating water flow rate, the TDS in the circulating water, and the design drift loss according to the following AP-42 equation:

$$E = kQ(60 \text{ min/hr})(8.345 \text{ lb water/gal}) \left[\frac{C_{TDS}}{10^6} \right] \left[\frac{\%DL}{100} \right] \tag{Equation 1}$$

- Where,
- E = Particulate matter emissions, pounds per hour
 - Q = Circulating water flow rate, gallons per minute = 61,500 gpm
 - CTDS = Circulating water total dissolved solids, parts per million = 8,000 ppm
 - DL = Drift loss, % = 0.0005%
 - k = particle size multiplier, dimensionless

The particle size multiplier “k” has been added to the AP-42 equation to calculate emissions for various PM size ranges, including PM₁₀ and PM_{2.5}. Maricopa County uses a factor of 31.5% to convert total PM emissions to PM₁₀. A “k” value of 0.315 shall be used for the PM₁₀ multiplier and a k value of 0.189 shall be used for the PM_{2.5} multiplier - a ratio of 0.6 of 0.315 to convert cooling tower PM₁₀ emissions to PM_{2.5} emissions.

- f. OPACITY LIMITS:
 - i. The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant other than uncombined water, in excess of 20 percent opacity, except as described in County Rule 322 §302.1 and this Permit Condition.
 [County Rule 322 §302.1] [County Rule 323 §302] [locally enforceable only]
 - ii. Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.
 [SIP Rule 30]
 - iii. Opacity Determination (Certified Reading): Opacity determined by observations of visible

emissions conducted in accordance with EPA Reference Method 9 as modified by EPA Reference Method 203B except opacity of visible emissions from intermittent sources. Opacity of visible emissions from intermittent sources shall be determined by observations conducted in accordance with methods found in County Appendix C.

[County Rule 300 §501] [locally enforceable only]

- iv. The Permittee shall monthly conduct a facility walk-through and observe each Gas Turbine for emissions other than condensed water. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information.

[County Rule 323 §501.1] [County Rule 210 §302.1(c)(1)] [locally enforceable only]

- v. If visible emissions are observed from any device capable of emitting any air contaminant other than condensed water and the facility has never had an opacity violation in the 12 months preceding the observation; the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 as modified by EPA Reference Method 203B by a certified visible emissions (VE) reader. This certified reading shall be taken within 3 days of the observance of visible emissions and taken weekly thereafter during each week that the unit is in operation until there are no visible emissions. If the problem is corrected before three days has passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information. If an opacity violation has occurred at the facility in the 12 months preceding the observation of visible emissions, the required certified reading shall be taken within 24 hours of the observation of visible emissions.

[County Rule 210 §302.1(c)(1)] [locally enforceable only]

19. FACILITY-WIDE REQUIREMENTS:

- a. The Permittee shall combust only Pipeline Natural Gas in all turbines.
[40 CFR §60.331(u)] [40 CFR §72.2]
- b. An annual fuel use limit of 18,800,000 MMBtu/year higher heating value (HHV) combined across the new gas turbines GT3 - GT7.
- c. An annual fuel use limit of 2,928,000 MMBtu/year (HHV) combined across the existing gas turbines GT1 - GT2. The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations, or premises under his control in such quantities or concentrations as to cause air pollution.
[SIP Rule 32.A] [County Rule 320 §300]
- d. Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.
[SIP Rule 32.C] [County Rule 320 §302]
- e. Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.
[SIP Rule 32.D] [County Rule 320 §303]

20. OPERATIONAL REQUIREMENTS:

- a. OPERATIONAL REQUIREMENTS FOR UNITS GT-1 THROUGH GT-7:
 - i. Permittee must operate and maintain the stationary combustion turbines, air pollution control

equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

[40 CFR §60.4333] [County Rule 322 §301.3]

b. OPERATIONAL REQUIREMENTS FOR THE COOLING TOWER:

The cooling tower shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling tower vendor to achieve less than or equal to 0.0005 percent drift. The total dissolved solids (TDS) content of the cooling water in the cooling tower shall not exceed 8,000 milligrams per liter (mg/l).

[County Rule 240 §308.1(a), (d), (e)]

c. OPERATIONAL REQUIREMENTS FOR THE WATER INJECTION AND SELECTIVE CATALYTIC REDUCTION EMISSION CONTROL SYSTEMS FOR UNITS GT3 THROUGH GT7:

- i. The Permittee shall operate and maintain a water injection and Selective Catalytic Reduction (SCR) system as part of each Turbine.
- ii. The Permittee shall maintain an approved Operations and Maintenance (O&M) plan for each water injection and SCR system required by these Permit Conditions. The plans shall be in a format acceptable to the Department and shall specify the procedures used to maintain the SCR system.
- iii. The Permittee shall at all times comply with the currently approved version of the O&M Plan.
- iv. The SCR control system shall be designed so it will not inject ammonia into the SCR system when the inlet temperature to the catalyst is less than the Minimum Catalyst Temperature to be established as part of the O&M Plan.

[County Rule 210 §302.1(c)(1) and §406]

d. OPERATIONAL REQUIREMENTS FOR THE CONTINUOUS EMISSIONS MONITORING SYSTEMS FOR UNITS GT3 THROUGH GT7:

- i. Required monitoring systems shall meet or exceed all applicable design, installation, operational, quality assurance, and other applicable requirements of 40 CFR Parts 60 and 40 CFR Part 75. If there is a conflict between Parts 60 and 75, Part 75 shall govern.
- ii. The fuel flow monitor shall meet or exceed specifications contained in Section 2.1.5.1 of Appendix D to Part 75.
- iii. The Permittee shall ensure that the CEMS are in operation and monitoring unit emissions at all times that the turbine combust any fuel except during periods of calibration, quality assurance, preventive maintenance, repair, back-ups of data from the data acquisition and handling system, or recertification. Malfunctions shall be recorded and reported as required in 40 CFR Part 60 and 40 CFR Part 75. If there is a conflict between Parts 60 and 75, Part 75 shall govern.
- iv. The Permittee shall ensure that the design, installation, operation, maintenance, O&M/QA Plan(s), and on-site spare parts inventory are in accordance with the requirements of 40 CFR Parts 60, 40 CFR §75.21.
- v. The Permittee shall submit and maintain an approved Operations and Maintenance (O&M) plan to the Department for each Continuous Emissions Monitoring System (CEMS) required by these Permit Conditions. The plans shall be in a format acceptable to the Department and shall specify applicable operating parameters necessary to ensure continuous and accurate emissions monitoring. The O&M Plan shall be submitted within 30 days after the equipment covered has been started up.

[40 CFR Part 75, Subpart C]

- vi. The Permittee shall submit and maintain an approved Quality Assurance Plan (QAP) to the Department for each CEMS required by these Permit Conditions. The plans shall be in a format acceptable to the Department.

- vii. A combined O&M Plan and Quality Assurance Plan for the CEMS may be submitted.
- viii. The Permittee shall at all times comply with the currently approved version of the O&M and QA Plans.
- ix. The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times. The certification of zero air material is unlimited and there is no expiration date for the certification.

[40 CFR §60.47a (i) (2), and 40 CFR §75.22(c)]
- x. The Permittee shall re-calibrate and re-certify any CEMS as required by and within the time periods required by 40 CFR Parts 60 and 75.

[40 CFR §75.20]
- xi. The Permittee shall implement maintenance checklists to ensure proper operation and accuracy of the CEMS. The checklists will be part of the O&M and QA/QC Plans.
- xii. The Permittee shall maintain records of all certifications, calibrations, testing, maintenance (including completed maintenance checklists), and repairs made to the CEMS.

[40 CFR 75 Subparts A, B, C, Appendix A, Appendix B] [County Rule 210 §302.1(c)(1)]
- xiii. Daily zero, span, and other quality assurance activities shall be performed according to the requirements of 40 CFR Part 75 and Part 60. Daily zero and span calibration drifts according to 40 CFR §60.13(d). Note that daily zero, span and Quality Assurance activities are not required on any calendar day in which no fuel is combusted in the unit for which the CEMS is monitoring or if a malfunction of the CEMS occurs preventing the calibration from being performed.

[County Rule 210 §302.1(c) (2)] [40 CFR part 75 Appendix B]
- e. OPERATIONAL REQUIREMENTS FOR THE OXIDATION CATALYST FOR GT3 THROUGH GT7:
 - i. The Permittee shall install, operate, and maintain an Oxidation Catalyst (OC) System as part of each Turbine.
 - ii. The Permittee shall maintain an approvable Operations and Maintenance (O&M) plan to the Department for each OC system required by these permit conditions. The plans shall be in a format acceptable to the Department and shall specify the procedures used to maintain the OC system. The O&M plan shall be submitted within 30 days after the equipment covered has been started up.
 - iii. The Permittee shall at all times comply with the currently approved version of the O&M Plan.

[County Rule 210 §302.1(c) (1) and §406]
- f. OPERATIONAL REQUIREMENTS FOR GT3 THROUGH GT7:
 - i. The Permittee shall limit the number of startups and shutdowns for all turbines combined to no more than 2,490 hours per 12-month rolling period.
 - ii. The Permittee shall limit the net electric sales for each GT to no more than the design efficiency times the potential electric output, on a 3 calendar year rolling average. The design efficiency and potential electric output will be determined during the initial performance test using the methods referenced in 40 CFR 60 Subpart TTTT.

[County Rule 210 §302.1(c) (1) and §406]
- g. OPERATIONAL REQUIREMENTS FOR THE SF₆ CIRCUIT BREAKERS:

The Permittee shall install and maintain SF₆ circuit breakers with a maximum annual leakage rate of 0.5% by weight. The new circuit breakers shall be equipped with a 10% by weight leak detection system. The leak detection system shall be calibrated in accordance with manufacturer's specifications.

[County Rule 210 §302.1(c)(1)] [locally enforceable only]

21. MONITORING AND RECORDKEEPING FACILITY-WIDE:

Monitoring and Recordkeeping records shall be made available to the Control officer upon request.

[County Rule 210 §302.1]

a. REQUIREMENTS FOR THE STEAM UNITS ONLY:

The Permittee shall meet the monitoring requirements as specified in 40 CFR 75 §§10, 11 (d), §12 (a).

[County Rule 371] [40 CFR Part 75]

i. Recordkeeping Requirements for the Steam Units Only:

The Permittee shall maintain a file of all measurements as required by Rule 210 §302.1.d, including continuous monitoring system (CO and NO_x emission records), monitoring device (operating parameter record; 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 40 CFR Part 75 Subpart F recorded for a period of 5 years.

[County Rules 210 and 371] [40 CFR Part 75 Subpart F]

b. GAS TURBINES:

The Permittee shall hourly monitor and record the hours of operation and operating mode (startup, shutdown, or normal) of Units GT3 through GT7; exhaust temperature prior to entering the SCR systems and the OX-ECS; the amount of natural gas combusted in individual Units GT3 through GT7; and the actual heat input of Units GT3 through GT7. The Permittee may monitor the combined fuel usage in Units GT3 through GT7 instead of individually. The Permittee shall monthly calculate and record the particulate emissions from Units GT1 and GT2 and the Cooling Tower, all emissions from GT3 through GT7, and shall monthly compare the calculated emissions to the limits contained in the permit.

c. NO_x MONITORING REQUIREMENTS FOR GT3 THROUGH GT7:

APS shall install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO_x monitor and a diluent gas (either oxygen (O₂) or carbon dioxide (CO₂)) monitor to determine the hourly NO_x emission rate in parts per million (ppm) corrected to 15% O₂. The CEMS will be installed and certified according to Appendix A of 40 CFR Part 75, and the relative accuracy test audit (RATA) of the CEMS will be performed on a lb/MMBtu basis. APS shall implement the QA program and plan described in Section 1 of Appendix B to Part 75. Subpart KKKK excess emissions will be identified according to 40 CFR §60.4350 procedures.

[40 CFR §60.4335]

d. SO₂ MONITORING REQUIREMENTS FOR GT3 THROUGH GT7:

To be exempted from fuel sulfur monitoring requirements, APS must demonstrate that the potential sulfur emissions expressed as SO₂ are less than 0.060 lb/MMBtu for continental US areas. The demonstration can be made by providing information from a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet. Because the new GTs will combust only pipeline quality natural gas with a typical SO₂ emission rate of 0.0006 lb/MMBtu, this is the method that APS proposes to meet the Subpart KKKK SO₂ monitoring requirements.

[40 CFR §§60.4360 and 60.4365]

e. COOLING TOWER:

The Permittee shall daily monitor and record the conductivity of all Cooling Tower water and shall monthly monitor and record the Total Dissolved Solids (TDS) content of the Cooling Tower water. The conductivity readings of the cooling water do not need to be taken on a particular day if the cooling tower fans have not been in operation during that day.

[County Rule 210 §302.1(c) (1)]

f. PIPELINE NATURAL GAS:

The Permittee shall monitor for compliance with the sulfur dioxide limits of this permit by obtaining and recording the sulfur content of the natural gas used in the Gas Turbines as follows:

i. The Permittee shall monitor sulfur content of the natural gas at least once every calendar year,

consistent with the requirements of 40 CFR Part 75, Appendix D. Section 2.3.1.4.

- ii. If at any time a fuel sulfur analysis indicates noncompliance with the fuel sulfur limit of Pipeline Natural Gas, the Permittee shall notify the Administrator and the Control Officer of such excess emissions within one week of the analysis and shall follow the procedures in 40 CFR Part 75, Appendix D. Section 2.3.1.4 for additional monitoring.
- iii. If there is a change in fuel supplier, the Control Officer shall be immediately notified and the Permittee shall document that the natural gas meets the requirements of this permit with a purchase contract, tariff sheet, or by pipeline transportation contract. If one of these documents cannot be produced, the Permittee shall document the sulfur content by testing within 60 days of such change in fuel supplier in accordance with the requirements of 40 CFR Part 75 Appendix D.

[County Rule 210 §302.1.c] [locally enforceable only]

[40 CFR §§60.334(h)(3)(2) and 335 (b)(10)] [40 CFR 75 Appendix D, §2.3.1.4]

g. **New SF₆ CIRCUIT BREAKERS:**

Records of all the new SF₆ circuit breaker calibrations shall be maintained on site and be made available to the Control Officer upon request.

[County Rule 210 §302.1(c)(1)] [locally enforceable only]

h. **EMERGENCY GENERATORS:**

The Permittee shall maintain records of all periods when the emergency generators are run, including the run time and the time of day the units are run.

[County Rule 210 §302.1(c)(1)] [locally enforceable only]

22. REPORTING REQUIREMENTS:

a. **REPORTING REQUIREMENTS FOR THE STEAM UNITS ONLY:**

The Permittee shall electronically report to EPA the data and information as required by 40 CFR §75.64 on a quarterly basis. Quarterly submittals shall include facility data, unit emission data, monitoring data, control equipment data, monitoring plans and quality assurance data and results.

[County Rules 210 and 371] [40 CFR 75]

b. **REPORTING REQUIREMENTS:**

The Permittee shall file a semiannual Monitoring Report and Compliance Certification no later than April 30, and shall report the monitoring and compliance status of the source during the period between October 1 of the previous year and March 31 of the current year. The second report and certification shall be submitted no later than October 31 and shall report the monitoring and compliance status of the source during the period between April 1 and September 30 of the current year. The Monitoring Report and Compliance Certification shall be sent to the Compliance Division with attention to: Compliance Division Manager and shall contain the following information at a minimum:

- i. Fuel usage and emission estimates necessary to determine compliance with any conditions of this permit.

[County Rule 210 §302.1.e. (1)] [locally enforceable only]

- ii. Dates on which opacity readings were taken, the test method used, and the observed opacity;

[County Rules 300 and 210] [SIP Rule 30]

- iii. Monthly usage reports of each volatile surface coating related to surface coating.

[County Rule 210 §302.1.e. (1)] [locally enforceable only]

- iv. Gasoline Delivery and Storage:

- 1) Summary of the monthly and 12-month rolling total records of the gasoline delivered.

- 2) Records of the inspections of the fill pipe assembly required by these Permit Conditions.

[County Rule 210 §302.1.e. (1)] [locally enforceable only]

- v. Any deviations from the approved Dust Control Plan.

[County Rule 210 §302.1.e. (1)] [locally enforceable only]

vi. The dates and description of any usage of cutback and emulsified asphalt.

[County Rule 210 §302.1.e. (1)] [locally enforceable only]

vii. The dates, run time, and time emergency engines are run.

[County Rule 210 §302.1.e. (1)] [locally enforceable only]

c. REPORTING REQUIREMENTS SUBPART KKKK.

For Units GT3 through GT7 the Permittee is required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, reports of excess emissions and monitor downtime must be submitted in accordance with 40 CFR §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. Paragraphs §60.4380 and §60.4385 describe how excess emissions are defined for Subpart KKKK.

[40 CFR §60.4375]

23. PERFORMANCE TESTING:

Testing Requirements:

The Permittee shall conduct a PM₁₀ performance test on one of the units GT1 or GT2 using EPA Test Methods 201A and 202 within 60 days after the after the first unit from GT3-GT7 has achieved the capability to operate at the maximum production rate on a sustained basis. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days after the first unit from GT3-GT7 has achieved the capability to operate at its maximum capacity, whichever occurs last.

EPA Test Method 5 may be substituted for EPA Test Methods 201A if the Permittee agrees to assume that all particulates are PM₁₀.

The Permittee shall conduct performance tests on the following equipment within 60 days after the GT units have achieved the capability to operate at their maximum production rate on a sustained basis. The testing deadline may be extended by the Control Officer for good cause, but in no case shall the testing deadline, including test report submittal, extend beyond 180 days after the new applicable equipment has achieved the capability to operate at its maximum capacity, whichever occurs last. Failure to test within the time frame specified by this condition shall result in a continuing violation for each day beyond the deadline until the required performance test has occurred.

[County Rule 200 §309] [County Rule 270 §401] [SIP Rule 27 §A] [40 CFR §60.8(a)]

Testing for General Electric LMS100 Units GT3, GT4, GT5, GT6, and GT7:

Table 6: Stack Performance Test Requirements for the Simple Cycle Units GT3 through GT7.

Pollutant	Units to be Tested	Test Method	Testing Frequency
NO _x ¹	GT3, GT4, GT5, GT6, and GT7	CEMS: RATA testing in accordance with 40 CFR Part 75 ² Initial Testing Requirements Subpart KKKK: Test methods set forth in 40 CFR§ 60.8 and 40 CFR 60 Appendix A	CEMS: From 40 CFR Part 75: Subsequent performance tests shall occur during every fourth consecutive QA operating quarter or during every 8th consecutive calendar quarter, whichever occurs first.
CO	GT3, GT4, GT5, GT6, and GT7	RATA testing in accordance with 40 CFR Part 60, Appendix F	CEMS: From 40 CFR Part 75: Subsequent performance tests shall occur during every fourth

Table 6: Stack Performance Test Requirements for the Simple Cycle Units GT3 through GT7.

			consecutive QA operating quarter or during every 8th consecutive calendar quarter, whichever occurs first.
PM ₁₀ ³	GT3, GT4, GT5, GT6, and GT7	EPA Test Methods 201A and 202	Annually, between 9 and 14 months from the date of the last PM ₁₀ test.
VOC ³	GT3, GT4, GT5, GT6, and GT7	EPA Test Methods 25A and 18	Annually, between 9 and 14 months from the date of the last PM ₁₀ test.
Ammonia	GT3, GT4, GT5, GT6, and GT7	EPA Conditional Test Method CTM-027 or Bay Area Air Quality Management District Source Test Procedure ST-1B or EPA Method 320	Tests shall be performed every three years (within 34 to 38 months of the previous test). In addition, an ammonia test shall occur within 90 days following complete SCR system catalyst replacement.

¹ The performance evaluation of the CEMS may either be conducted separately or as part of the performance test required by 40 CFR 60 Subpart KKKK.

² The performance test for NO_x emissions specified above may be modified as follows:
 -Perform a minimum of 9 RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 75 and 100 percent of peak (or the highest physically achievable) load, and
 -Use the test data both to demonstrate compliance with the applicable NO_x emission limit and to produce the required reference method data for the RATA of the CEMS.

³ Initial PM₁₀ and VOC tests shall be performed on all 5 GTs. Subsequent annual PM₁₀ and VOC tests shall be performed on at least 2 GTs. The same GT may not be tested in consecutive years and all 5 GTs shall be tested at least once every 3 years. The higher emission rate from the 2 annual PM₁₀ and VOC performance tests shall be applied to all 5 GTs until a new emission rate is established by the next annual performance tests.

For PM₁₀ testing, EPA Test Method 5 may be substituted for EPA Test Method 201A if the Permittee agrees to assume that all particulates are PM₁₀.

Upon written request and adequate justification from the Permittee, The Department may waive a specific annual test and/or allow for testing to be done at a less than maximum operating capacity.

Testing times may be changed with the permission of the Control Officer.

[County Rule 200 §309] [County Rule 210 §302] [County Rule 270] [County Rule 210 §302.1c] [40 CFR §60.8] [40 CFR §60.50Da] [40 CFR §60.335] [40 CFR Part 60 Appendix F] [40 CFR §52.21(j)] [40 CFR Part 75 Appendix B]

- a. Testing Criteria: Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified in the Test Methods section of this permit condition unless otherwise specified by the Control Officer and/or Administrator. The Control Officer and/or Administrator may specify or approve minor changes in methodology to a reference method, approve the use of an equivalent test method, approve the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waive the requirement for performance tests because the Permittee has demonstrated by other means that the source is in compliance with the standard. For NSPS facilities, only EPA has the authority to waive initial testing requirements.

[County Rule 270 §402] [SIP Rule 27 §B] [40 CFR §60.8(b)]

- b. Test Methods: Sampling sites and velocity traverse points shall be selected in accordance with EPA Test Method 1 or 1A. The gas volumetric flow rate shall be measured in accordance with EPA Test Method 2, 2A, 2C, 2D, 2F, 2G or 19. The dry molecular weight shall be determined in accordance with EPA Test Method 3, 3A or 3B. The stack gas moisture shall be determined in accordance with EPA Test Method 4. These methods must be performed, as applicable, during each test run.

[County Rule 270 §301.1] [SIP Rule 27 §B] [Rule 323 §504]

- c. Operating Conditions: Performance tests shall be conducted under representative operating conditions and all equipment shall be operated during testing in accordance with the most recently approved O&M Plan or according to its operations manual if no O&M Plan is required. The Permittee shall make available to the Control Officer any records necessary to determine appropriate conditions for performance tests. Operations during periods of startup, shutdown, and equipment malfunction shall not constitute representative conditions for performance tests unless otherwise specified in the applicable standard or permit conditions.

[County Rule 270 §403] [40 CFR §60.8(c)]

- d. Monitoring Requirements: The Permittee shall record all process and control equipment information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Operational parameters shall be monitored and recorded at least once every 30 minutes during each of the required test runs and documented in the test report. The operational parameters monitored shall be capable of indicating that the equipment is operating within the permitted limits, both during and after the performance tests.

- i. This condition does not apply to RATA testing.

[County Rule 270 §301.1] [SIP Rule 27 §B] [Rule 323 §504]

- e. Test Protocol Submittal: The Permittee shall submit a separate test protocol for each performance test to the Department for review and approval at least 30 days prior to each performance test unless otherwise specified in the applicable standard or in this permit. The test protocol shall be prepared in accordance with the most recent version of the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County." A completed copy of the Department's "Test Protocol Submittal Form" shall accompany each test protocol.

[County Rule 270 §301.1] [SIP Rule 27 §B]

- f. Notice of Testing: The Permittee shall notify the Department (Attn: Performance Testing Supervisor) in writing at least 30 days in advance of the actual date and time of each performance test unless otherwise specified in the applicable standard or in this permit so that the Department may have a representative attend.

[County Rule 270 §404] [40 CFR §60.8(d)]

- g. Testing Facilities Required: The Permittee shall install any and all sample ports or platforms necessary to conduct the performance tests, provide safe access to any platforms, and provide the necessary utilities for testing equipment.

[County Rule 270 §405] [SIP Rule 42] [40 CFR §60.8(e)]

- h. Minimum Testing Requirements: Each performance test shall consist of three separate test runs with each test run being at least one hour in duration unless otherwise specified in the applicable standard or in this permit. The same test methods shall be used simultaneously for both the inlet and outlet measurements, if applicable, or justification for any necessary exceptions shall be provided in the test protocol. Emissions rates, concentrations, grain loadings, and/or efficiencies shall be determined as the arithmetic average of the values determined for each individual test run. Performance tests may only be stopped for good cause, which 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 a performance test without good cause after the first test run has commenced shall constitute a failure of the performance test.

- i. This condition does not apply to RATA testing

[County Rule 270 §406]

- i. Test Report Submittal: The Permittee shall complete and submit a separate test report for each performance test to the Department within 45 days after the completion of testing unless otherwise specified in the applicable standard or in this permit. The test report shall be prepared in accordance with the most recent version of the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County." A completed copy of the Department's "Test Report Submittal Form" shall accompany each test report.

[County Rule 270 §301.1] [SIP Rule 27 §B]

- j. Compliance with Emission Limits: Compliance with allowable emission limits and standards shall be determined by the performance tests specified in this permit. If test results do not demonstrate compliance with the requirements of these permit conditions, the Permittee shall make the necessary repairs and/or adjustments to the equipment and demonstrate compliance through retesting. This will not nullify the fact that test results did not demonstrate compliance with the requirements of the permit conditions or nullify any violations that may result from this noncompliance. In addition to compliance demonstrations, test results shall be used for annual emissions inventory purposes if the Permittee is required to complete an emissions inventory survey.

[County Rule 270 §407]

- k. Correspondence: All test extension requests, test protocols, test date notifications, and test reports required by this permit shall be submitted to the Department and addressed to the attention of the Performance Test Evaluation Supervisor.

[County Rule 270 §301.1] [SIP Rule 27 §B]

- l. Authority: The above testing requirements represent the minimum level of testing to monitor for compliance with the emission limits in this permit. Nothing in this section shall prevent the Control Officer from requiring additional performance testing as deemed necessary to ensure permit compliance and protection of the public health and welfare.

[County Rule 200 §309] [County Rule 270 §402.5]

EMERGENCY GENERATORS:

24. OPERATIONAL LIMITATIONS:

- a. The Permittee shall limit the operation of each of the emergency engines to no more than 100 hours each per calendar year for the purposes of maintenance checks and readiness testing.

[Rule 324 §§104.5, 205] [40 CFR §§60.4211(e), 60.4243(d)]

- b. The Permittee shall limit testing of these generators to 2 hours duration between the hours of 8 a.m. to 2 p.m.

[Rule 220 §302.2] [Locally Enforceable Only]

- c. The Permittee shall limit the total hours of operation of each of the emergency engines to no more than 500 hours each per any twelve consecutive months including the hours listed in Subpart [a] above. The daily trigger of Best Available Control Technology (BACT) has been exempted for the emergency engine(s).

[Rule 220 §302.2] [Locally Enforceable Only]

- d. The emergency engine(s) shall not be used for peak shaving. The emergency engine(s) shall only be used for the following purposes:

- i. For power when normal power service fails from the serving utility or if onsite electrical transmission or onsite power generation equipment fails;
- ii. Reliability-related activities such as engine readiness, calibration, or maintenance or to prevent the occurrence of an unsafe condition during electrical system maintenance as long as the total number of hours of the operation does not exceed 100 hours per calendar year per engine as evidenced by an installed non-resettable hour meter;

[SIP Rule 324 §104] [40 CFR §§60.4211(e), 60.4243(d)]

25. FUEL LIMITATIONS:

- a. Two 2.5 MW (or less) Emergency Generator Engines: The Permittee shall only use diesel fuel that has a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and has a maximum sulfur content of 15 parts per million (ppm) in the following engines, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted:
[40 CFR §§60.4207(a,b), 80.510(a,b)]
- b. Generac 125 hp Emergency Generator Engine: The Permittee shall only operate spark ignition (SI) engines using natural gas or LPG.
[Rule 220 §302.2] [Locally Enforceable Only]

26. MONITORING:

The Permittee shall install a non-resettable hour meter prior to startup of the engine(s). The Permittee shall not operate the engine(s) unless the cumulative run time meter is installed and working properly. If the non-resettable meter is found to be malfunctioning, operation of the engine will cease until corrective action(s) can be implemented or the function of the meter is restored.
[Rule 220 §302.4] [40 CFR §§60.4209, 60.4237]

27. OPACITY:

- a. The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity, except as specified in Permit Condition 28.
- b. Compliance with visible emissions shall be determined using the techniques specified in EPA Reference Method 9, 40 CFR Part 60, Appendix A.
[SIP Rule 324 §§303, 503.8]

28. NSPS SUBPART III REQUIREMENTS:

- a. The following engines shall be certified by the manufacturer to meet the specified EPA emission standard and shall comply with all requirements of this Permit Condition:
Two 2.5 MW (or less) Emergency Generator Engines – Tier 2
[40 CFR §60.4205]
- b. Additional Opacity Standard:
For 2007 model year and later CI ICE rated 3,000 HP or less and 2011 model year and later CI ICE rated greater than 3,000 HP, the Permittee shall not allow exhaust opacity to exceed 15% during the lugging mode.
[40 CFR §§60.4205, 60.4202, 89.113(a)(2)]
- c. Crankcase Emissions:
For the engines specified in Subsection b of this Permit Condition, the Permittee shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction or fire pump engines.
[40 CFR §§60.4205, 89.112(e)]
- d. The Permittee shall operate and maintain each engine according to the manufacturer's written instructions, or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine.
[40 CFR §§60.4211(a), 60.4206]
 - i. The Permittee shall only change those engine settings that are permitted by the manufacturer.
[40 CFR §60.4211(a)]
 - ii. The Permittee shall meet the requirements of 40 CFR Part 89 as it applies.
[40 CFR §60.4211(a)]

29. NSPS SUBPART JJJJ REQUIREMENTS:

- a. The following engine shall be certified by the manufacturer to meet the specified EPA emission standard and shall comply with all requirements of this Permit Condition:

Generac 125 hp LPG Emergency Generator Engine

Emission Standards (g/hp-hr)		
NO _x	CO	THC
4.32	129.14	0.20

[Generac supplied EPA data] [40 CFR §60.4233]

- b. The Permittee shall operate and maintain the engines according to the manufacturer’s emission-related written instructions

[40 CFR §60.4243]
- c. The Permittee shall meet the requirements as specified in 40 CFR Part 1068, Subparts A through D, as they apply.

[40 CFR §60.4243]

30. RECORDKEEPING FOR EMERGENCY ENGINES:

- a. The Permittee shall maintain the following records for a period of at least five years from the date of the records and make them available to the Control Officer upon request:
 - i. An initial one time entry listing the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.
 - ii. Monthly rolling twelve month total of hours of operation, including hours of operation for testing, reliability and maintenance.
 - iii. Fuel type and sulfur content of fuel. The Permittee shall maintain fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the applicable sulfur limit shall be permitted as evidence of compliance.
 - iv. An explanation for the use of the engine if it is used as an emergency engine.
 - v. Records of the 12-month rolling total emissions.

[SIP Rule 324 §502] [Rule 324 §501.4] [40 CFR §§60.4214(b), 60.4245(b)]
 - vi. Written records of all maintenance performed on the engines specified in Permit Condition 29.

[40 CFR §60.4245(a)(2)]
- b. The Permittee shall maintain a copy of manufacturer data for each engine listed in Permit Conditions 28 indicating compliance with the standards in this Permit.

[Rule 220 §302.7] [40 CFR §§60.4211(b)(3), 60.4245(a)(3)]
- c. For each engine listed in Permit Conditions 29, the Permittee shall maintain an onsite copy of the manufacturer’s written instructions, or procedures developed by the Permittee in accordance with these Permit Conditions and make it available to MCAQD upon request.

[Rule 220 §302.7]

31. EMERGENCY PROVISIONS:

The Permittee shall comply with all record keeping and reporting requirements of Rule 130 (Emergency Provisions) and Rule 140 (Excess Emissions) if the annual allowable hours of operation are exceeded.

[Rule 130; Rule 140]

32. PERMIT SHIELD:

Compliance with the conditions of this Permit shall be deemed compliance with the applicable requirements identified in Appendix B of this Permit. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §§405.7, 407]

33. ACID RAIN PERMIT:

The Acid Rain Phase II Permit Application and Certificate of Representation signed by the Designated Representative and submitted to the Control Officer shall constitute the Permittee's Acid Rain Permit.

- a. The Permittee shall comply with the Acid Rain Permit, 40 CFR Parts 72, 73, and 75, and the Acid Rain requirements of Permit Condition 24.a.
 - i. The Permittee shall comply with the Acid Rain Permit, 40 CFR Parts 72, 73, and 75.
 - ii. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- b. The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
- c. The relevant Conditions of this Permit and the Acid Rain Permit, including but not limited to, the Allowable Emission Limits, Operation Requirements, Monitoring/Recordkeeping Requirements, Reporting Requirements, and Testing Requirements shall constitute the Compliance Plan required by 40 CFR Part 72 Subpart D.
- d. SO₂ Requirements
 - i. The Permittee shall hold SO₂ Allowances as of the allowance transfer deadline for each Part 75 affected operating unit's compliance subaccount not less than the total annual actual emissions of SO₂ for the previous calendar year from each Part 75 affected operating unit as required by the Acid Rain Program.
 - ii. The Permittee shall comply with the applicable Acid Rain emission limitations for sulfur dioxide.
 - iii. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77. The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - 1) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - 2) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.
 - iv. An affected unit shall be subject to the requirements under 33.d.i and 33.d.ii of this condition starting on the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR §72.6(a)(3).
 - v. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
 - vi. An allowance shall not be deducted in order to comply with the requirements under 33.d.i and 33.d.ii of this condition prior to the calendar year for which the allowance was allocated.
 - vii. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR §72.7 or 72.8 and no provision of law shall be construed to limit the authority of the

United States to terminate or limit such authorization.

- viii. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.
- e. The SO₂ allowances for the steam boilers are as follows:

Table 2: SO₂ Allowances for Affected Systems

Affected Units	Pollutant	Years 2000 - 2009	Years 2010 and thereafter
Steam Unit 1	SO ₂	56	40
Steam Unit 2	SO ₂	132	129

None of these units are subject to a NO_x limit pursuant to 40 CFR Part 76.

- f. The SO₂ Allowance Allocations for each Gas Turbine are as follows:

Table 7: SO₂ Allowance Allocations

Affected Units	Pollutant	Allowances
GT3	SO ₂	NA
GT4	SO ₂	NA
GT5	SO ₂	NA
GT6	SO ₂	NA
GT7	SO ₂	NA

NA means there are no SO₂ allocations for these units.

None of these units are subject to a NO_x limit pursuant to 40 CFR Part 76.

- g. Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - i. The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR §72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - ii. All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - iv. Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- h. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72 subparts I and 40 CFR Part 75.

[County Rule 371] [40 CFR Parts 72, 73, and 75]

34. NON-RESALE GASOLINE STORAGE:

For any operations involving gasoline in stationary dispensing tanks greater than 250 gallons, the Permittee shall comply with all applicable conditions from County Rule 353: GASOLINE IN STATIONARY DISPENSING TANKS.

a. **ALLOWABLE THROUGHPUT:**

The Permittee shall limit the delivery of gasoline to the facility to less than 10,000 gallons per month and less than 120,000 gallons per year.

[Rule 210 §302, Rule 353 §305.2] [40 CFR §63.11116]

35. SURFACE COATING OPERATIONS:

(NOTE: THIS DOES NOT INCLUDE ARCHITECTURAL COATINGS WHICH IS COVERED ELSEWHERE IN THESE PERMIT CONDITIONS):

If the Permittee engages in any surface coating operations, the Permittee shall comply with all applicable conditions from County Rule 336: Surface Coating Operations.

[County Rule 336] [SIP Rule 336]

36. DEGREASERS:

If the Permittee engages in any degreasing operations, the Permittee shall comply with all applicable conditions from County Rule 331: Solvent Cleaning

[County Rule 331] [SIP Rule 331]

37. WIPE CLEANING:

If the Permittee engages in any wipe cleaning operations, the Permittee shall comply with all applicable conditions from County Rule 331: Solvent Cleaning.

[County Rule 331] [SIP Rule 331]

38. ARCHITECTURAL COATINGS:

If the Permittee applies any architectural coatings, the Permittee shall comply with the requirements of County Rule 335: Architectural Coatings.

[County Rule 335] [SIP Rule 335]

39. ABRASIVE BLASTING OPERATIONS:

If the Permittee engages in abrasive blasting activities, the Permittee shall comply with the requirements of County Rule 335: Abrasive Blasting.

[County Rule 312] [SIP Rule 312]

40. CUTBACK AND EMULSIFIED ASPHALT:

If the Permittee applies cutback and emulsified asphalt and other bitumens to roads, parking lots, driveways or other surfaces, the Permittee shall comply with the requirements of County Rule 340: Cutback and Emulsified asphalt.

[County Rule 340] [SIP Rule 340]

41. VOLATILE ORGANIC COMPOUNDS:

The Permittee shall comply with all applicable conditions from County Rule 330: Volatile Organic Compounds.

[County Rule 330] [Locally enforceable only]

APPENDIX "A": EQUIPMENT LIST
Ocotillo Generating Station, Permit Number V95-007

	Manufacturer	Serial Number	Model	Rated Capacity	Installed	Operational	Controls	CEMS	PNG
Unit 1 Steam Boiler	Combustion Engineering	AZ002045	n/a	1210 mmbtu/hr	1959	May-60	none	x	x
Steam Turbine	Westinghouse Electric	13A-2041-1	n/a	110 mw	1959	May-60	n/a		
Unit 2 Steam Boiler	Combustion Engineering	AZ002046	n/a	1210 mmbtu/hr	1958	Mar-60	none	x	x
Steam Turbine	Westinghouse Electric	10A-6680-8	n/a	110 mw	1958	Mar-60	n/a		
Combustion Turbine No.1 (GT1)	General Electric	17A5042	501-AA	55 mw (915 MMBtu/hr)	1972	Jan-72	n/a		x
Combustion Turbine No.2 (GT2)	General Electric	17A5056	501-AA	55 mw (915 MMBtu/hr)	1972	Feb-73	n/a		x
Combustion Turbine No.3 (GT3)	General Electric	TBD	LMS100	102 MW	TBD	TBD	Water inj. Ox Cat & SCR	x	x
Combustion Turbine No.4 (GT4)	General Electric	TBD	LMS100	102 MW	TBD	TBD	Water inj. Ox Cat & SCR	x	x
Combustion Turbine No.5 (GT5)	General Electric	TBD	LMS100	102 MW	TBD	TBD	Water inj. Ox Cat & SCR	x	x
Combustion Turbine No.6 (GT6)	General Electric	TBD	LMS100	102 MW	TBD	TBD	Water inj. Ox Cat & SCR	x	x
Combustion Turbine No.7 (GT7)	General Electric	TBD	LMS100	102 MW	TBD	TBD	Water inj. Ox Cat & SCR	x	x
Hybrid Cooling Tower	Marley		F454A45E4.006A	52,500 & 61,500 gpm	TBD	TBD			
Cooling Tower 1	Marley	653-3-10	653-3-07	58800 gpm	1959	May-60	n/a		
Cooling Tower 2	Marley	653-3-11	653-3-07	58800 gpm	1958	Mar-60	n/a		
Gasoline Storage Tank	Chris & Son	474844	n/a	2000 gal.	Mar. 91	Apr. 91	n/a		
Solvent Cleaning Tank	Handi-Kleen	n/a	n/a	n/a	n/a	n/a	n/a		
Emergency Diesel Engines	TBD	n/a	n/a	2.5 MMW	TBD	TBD	TBD		
LPG Generator	Generac	Engine 2112465	1342402	125 hp	2011	2012	none		

APPENDIX B: PERMIT SHIELD

**Ocotillo Power Plant
Permit Number V95-007
Renewal Number 1.0.1.0**

Identified below are all federal, state and local air pollution control requirements applicable to Ocotillo Power Plant at the time the permit is issued. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance included in the Appendix B “Permit Shield” of this permit.

County Enforceable Requirements

Maricopa County Air Pollution Control Regulations

Regulation I General Provisions

Rule 100	General Provisions and Definitions (06/06/07)
§104	Circumvention
§105	Right of Inspection of Premises
§106	Right of Inspection of Records
§ 301	Air Pollution Prohibited
§ 302	Applicability of Multiple Rules
§ 501	Reporting Requirements
§ 502	Data Reporting
§ 503	Emission Statements Required as Stated in the Act
§ 504	Retention of Records
§ 505	Annual Emissions Inventory Report

Regulation II Permits and Fee

Rule 200	Permit Requirements (3/26/08)
§ 301	Permits Required
§ 302	Title V Permit
§ 305	Dust Control Permit
§ 306	Subcontractor Registration
§ 308	Exemptions
§ 310	Permit Conditions
§ 311	Prohibition – Permit Modification
§ 312	Permit Posting Required
§ 401	Approval or Denial of Permit or Permit Revision
§ 402	Permit Reopenings; Revocation and Reissuance; Termination

Rule 200		Permit Requirements (3/26/08)
	§ 403	Permit Renewal and Expiration
	§ 404	Permit Transfers
	§ 406	Appeal
	§ 407	Air Quality Impact Models
	§ 408	Testing Procedures
	§ 409	Permit Fees
	§ 410	Portable Sources
	§ 411	Public Records; Confidentiality

Rule 210		Title V Permit Provisions (06/06/07)
	§ 301	Permit Application Processing Procedures
	§ 401	Fees Required
	§ 402	Permit Term
	§ 403	Source Changes Allowed without Permit Revisions
	§ 404	Administrative Permit Amendments
	§ 405	Minor Permit Revisions
	§ 406	Significant Permit Revisions
	§ 407	Permit Shields

Rule 270		Performance Tests (11/15/93)
	§ 301	Performance Tests Required (approved test methods)
	§ 401	Performance Tests Required
	§ 402	Testing Criteria
	§ 403	Testing Conditions
	§ 404	Notice of Testing
	§ 405	Testing Facilities Required
	§ 406	Minimum Testing Required
	§ 407	Compliance with the Emission Limits
	§ 408	Additional Testing

Rule 280		Fees (03/26/08)
	§ 301	Title V Permit Fees
	§ 304	Annual Adjustment of Fees

Rule 280	Fees (03/26/08)	
	§ 305	Calculation and Payment of Emissions-Based Fees
	§ 308	Gasoline Delivery Vessel Decal Fee
	§ 309	Open Burn Fee
	§ 310	Dust Control Permit Fee
	§ 313	Asbestos Notification and Plan Review Filing Fee
	§ 315	Delinquency Fee
	§ 402	Payment of Fees

Regulation III Control of Air Contaminants

Rule 300	Visible Emissions (03/12/08)	
	§ 301	Limitations
	§ 302	Exceptions
	§ 501	Compliance Determination – Opacity

Rule 310	Open Fugitive Dust Sources (01/27/10)	
	§ 301	General Requirements for Dust Generating Operations
	§ 304	Stabilization Requirements for Dust-Generating Operations
	§ 305	Control Measures for Dust-Generating Operations
	§ 308	Project Information Sign for Dust-Generating Operations
	§ 402	Dust Control Plan Requirements
	§ 410	Compliance Schedule
	§ 501	Compliance Determination
	§ 502	Recordkeeping
	§ 503	Records Retention
	§ 504	Test Methods Adopted by Reference

Rule 312	Abrasive Blasting (7/02/03)	
	§ 301	Limitations for Blasting
	§ 302	Requirements for Unconfined Blasting
	§ 505	Opacity Observations

Rule 314	Open Outdoor Fires and Indoor Fireplaces at Commercial and Institutional Establishments (03/12/08)	
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Rule 314	Open Outdoor Fires and Indoor Fireplaces at Commercial and Institutional Establishments (03/12/08)	
	§ 301	Prohibition – Open
	§ 303	Open Outdoor Fires not Required to obtain a Burn Permit
	§ 401	Fees Required
	§ 402	Burn Permit Application

Rule 320	Odors and Gaseous Air Contaminants (07/02/03)	
	§ 302	Material Containment Required
	§ 304	Limitation – Hydrogen Sulfide
	§ 306	Limitation – Sulfur from Industries

Rule 322	Power Plant Operations (10/17/07)	
	§ 104	Partial Exemptions
	§ 220	Natural Gas Curtailment
	§ 301	Limitations – Particulate Matter
	§ 302	Limitations – Opacity
	§ 303	Limitations – Sulfur in Fuel
	§ 304	Limitations – Nitrogen Oxides
	§ 305	Limitations – Carbon Monoxide
	§ 307	Emergency Fuel Use Notification
	§ 500	Monitoring and Records

Rule 330	Volatile Organic Compounds (6/19/96)	
	§ 302	Limitations - Non-Complying Solvents
	§ 304	Reductions Required
	§ 305	Equipment Cleanup
	§ 306	VOC Containment and Disposal
	§ 307	Exemptions
	§ 502	Determination of Compliance
	§ 503	Recordkeeping and Reporting

Rule 331	Solvent Cleaning (04/21/04)	
	§ 301	Solvent Handling Requirements
	§ 302	Equipment Requirements for all Cleaning Machines

Rule 331	Solvent Cleaning (04/21/04)	
	§ 303	Specific Operating and Signage Requirements for Cleaning Machines
	§ 304	Solvent Specifications for Non-Vapor Cleaning and Degreasing
	§ 308	Exemptions
	§ 501	Recordkeeping and Reporting
	§ 502	Compliance Determination and Test Methods

Rule 335	Architectural Coatings (7/13/88)	
	§ 301	Prohibition – Bituminous Pavement Sealers
	§ 302	Interim Limits – Non-Flat Architectural Coatings
	§ 303	Final Limits – Non-Flat Architectural Coatings
	§ 304	Limits – Flat Architectural Coatings
	§ 305	Limits – Specialty Coatings
	§ 306	Exemptions – Specific Use Coatings
	§ 307	Exemptions – Small Containers

Rule 336	Surface Coating Operations (04/07/99)	
	§ 301	Surface Coatings
	§ 302	Application Methods for Surface Coatings
	§ 303	Cleanup of Application Equipment
	§ 304	Handling and Disposal of VOC
	§ 305	Exemptions
	§ 501	Recordkeeping and Reporting
	§ 503	Compliance Determination and Test Methods

Rule 340	Cutback and Emulsified Asphalt (9/21/92)	
	§ 301	Limitations
	§ 302	Exemptions
	§ 303	Labeling Requirement
	§ 501	Recordkeeping and Reporting

Rule 353	Gasoline in Stationary Dispensing Tanks (06/19/99)	
	§ 301	Basic Tank Integrity
	§ 302	Fill Pipe Requirements
	§ 304	Equipment Maintenance and Use Required

Rule 353	Gasoline in Stationary Dispensing Tanks (06/19/99)	
	§ 503	Compliance Determination
	§ 504	Test Methods

Rule 370	Federal Hazardous Air Pollutant Program (07/07/10)	
	§ 301	Standards of Performance for Federally Listed Hazardous Air Pollutants
	§ 302	Standards of Performance for Federally Listed Hazardous Air Pollutants for Source Categories

Rule 371	Acid Rain (07/07/10)	
	§ 301	Incorporated Subparts of the Federal Acid Rain Regulations

Federally Enforceable Requirements

Accidental Release Program (40 CFR Part 68)

§ 112(r)(1)	General duty to identify, prevent and minimize the consequences of accidental releases of listed and other extremely hazardous substances.
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NESHAP Program (40 CFR Part 61)

Subpart M National Emission Standard for Asbestos	
§ 61.145	Standard for demolition and renovation
§ 61.150	Standard for waste disposal for manufacturing, fabricating, demolition, renovation, and spraying operations.

Permits Regulation (40 CFR Part 72)

Subpart A provisions	Acid Rain Program General Provisions
72.9(a), (b), (c), (d), (f), (g) ⁴	Standard Requirements
Subpart B	Designated Representative
72.20	Authorizations and Responsibilities of the Designated Representative
72.21	Submissions
72.22	Alternate Designated Representative
72.23	Changing the Designated Representative
72.24	Certificate of Representation
Subpart C	Acid Rain Permit Applications
72.30(a), (b)(2)(ii), (d)	Requirements to Apply
Subpart D	Acid Rain Compliance Plan and Compliance Options
72.40(a)(1)	General, Compliance Plan with sulfur dioxide emissions
Subpart I	Compliance Certification
72.90	Annual Compliance Certification Report
72.95	Allowance Deduction Formula
Appendix A	Methodology for Annualization of Emissions Limits
Appendix B	Methodology for Conversion of Emissions Limits
Appendix D	Calculation of Potential Electric Output Capacity

Sulfur Dioxide Allowance System (40 CFR Part 73)

Subpart B	Allowance Allocations
73.33(a), (c)	Authorized Account Representative
Subpart D	Allowance Transfer
73.50(b)	Scope and Submission of Transfers

Continuous Emission Monitoring (40 CFR Part 75)

Subpart A	General
75.4(b)(2),(c)(2),(i)(2)	Compliance Dates
Subpart B	Monitoring Provisions
75.10	General Operating Requirements
75.11(d)(2)	Specific Provisions for Monitoring SO ₂ Emissions
75.12(a),(b),(c)	Specific Provisions for Monitoring NO _x Emissions
75.13(b)	Specific Provisions for Monitoring CO ₂ Emissions
75.16(b),(e)	Special Provisions for Monitoring Emissions from Common, Bypass, and Multiple Stacks for SO ₂ Emissions and Heat Input Determinations
Subpart C	Operation and Maintenance Requirements
75.20	Initial Certification and Recertification Procedures
75.21	Quality Assurance and Quality Control Requirements
75.22	Reference Test Methods
75.24	Out-of-Control Periods and Adjustments for System Bias
Subpart D	Missing Data Substitution Procedures
75.30	General Provisions
75.31	Initial Missing Data Procedures
75.32	Determination of Monitor Data Availability for Standard Missing Data Procedures
75.33	Standard Missing Data Procedures for SO ₂ , NO _x , and Flow Rate
75.34	Units with Add-on Emission Controls
75.35	Missing Data Procedures for CO ₂ Data
75.36	Missing Data Procedures for Heat Input Determinations
Subpart E	Alternative Monitoring Systems

75.40	General Demonstration Requirements
75.41	Precision Criteria
75.42	Reliability Criteria
75.43	Accessibility Criteria
75.44	Timeliness Criteria
75.45	Daily Quality Assurance Criteria
75.46	Missing Data Substitution Criteria
75.47	Criteria for a Class of Affected Units
75.48	Petition for an Alternate Monitoring System
Subpart F	Recordkeeping Requirements
75.53(a), (b), (f)(1), (f)(4), (f)(6)	Monitoring Plan
75.57	General Recordkeeping Provisions
75.58(b), (c)	General Recordkeeping Provisions for Specific Situations
75.59	Certification, Quality Assurance, and Quality Control Record Provisions
Subpart G	Reporting Requirements
75.60	General Provisions
75.61	Notifications
75.62	Monitoring Plan Submittals
75.63	Initial Certification or Recertification Application Submittals
75.64	Quarterly Reports
Subpart H	NO_x Mass Emissions Provisions
Appendix A	Specifications and Test Procedures
Appendix B	Quality Assurance and Quality Control Procedures
Appendix D	Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units
Appendix F	Conversion Procedures
Appendix G	Determination of CO₂ Procedures

Protection of Stratospheric Ozone (40 CFR Part 82)

Subpart F	Recycling and Emissions Reduction
§ 82.106 - 82.124	Labeling Requirements
§ 82.156	Required Practices

§ 82.158	Standards for Recycling and Recovery Equipment
§ 82.161	Technician Certification
§ 82.166	Reporting and Recordkeeping Requirements
Subpart G	
Significant New Alternatives Policy Program	
§ 82.174(b)	Prohibition against use of substitute
§ 82.174(c)	Prohibition against use of substitute without adhering to use restrictions
§ 82.174(d)	Prohibition against use of substitute after added to list of unacceptable substitutes

State Requirements

Arizona Administrative Code

(Applicable in Maricopa County; ARS § 49-106)

R18-2-703.C.1	For existing fossil-fuel fired steam generators having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour: $E = 1.02Q^{0.769}$ where: Q = heat input in million BTU per hour.
R18-2-719.C.1	For existing stationary rotating machinery having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour $E = 1.02Q^{0.769}$ where: Q = heat input in million BTU per hour.
R18-2-724.C.1	For fossil-fuel fired industrial and commercial equipment (auxiliary boilers) with a heat input rate of 4200 million Btu per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour: $E = 1.02Q^{0.769}$ where: Q = heat input in million BTU per hour.

Federal Requirements
Maricopa County State Implementation Plan (as of 3/1/2007)

Regulation I General Provisions

Rule 3 - Air Pollution Prohibited

Regulation II Permits

Rule 27 - Performance Tests

Regulation III Control of Air Contaminants

Rule 30 - Visible Emissions

Rule 31 - Emissions of Particulate Matter

§§ A.1,2,3,4,6,7, - Non-Point Sources of Particulate Matter

§ H.1.a - Fuel Burning

Rule 32 - Odors and Gaseous Emissions

§§ A, C, D, E, F

Rule 33 – Storage and Handling of Petroleum Products

§ 33.3 Loading Into Stationary Storage Containers

Rule 34 – Organic Solvents – Volatile Organic Compounds

§ C.1 – Metal cleaning operations

§ C.2(a) – Cold Organic Solvent Cleaning

§ E.1 & E.2 – Spray Paint and Other Surface Coating Operations

§ G – Limits on VOC Discharge from Individual Equipment

§ K – Limits on Photochemically Reactive Solvent

§ L – Cutback Asphalt

Rule 34 – Organic Solvents – Volatile Organic Compounds

§ C.1 – Metal cleaning operations

§ K – Limits on Photochemically Reactive Solvent

Rule 310 – Fugitive Dust Sources

Rule 312 – Abrasive Blasting

Rule 314 – Open Outdoor Fires

Rule 353 – Gasoline in Stationary Dispensing Tanks

Regulation IV Production of Records: Monitoring, Testing and Sampling Facilities

Rule 40 Recordkeeping and Reporting
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Rule 41 § A Monitoring

Rule 42 Testing and Sampling

Rule 43 Right of Inspection
