

**Mesquite Generating Station
Permit Number V99-017
October 26, 2006**

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Mesquite Generating Station
V99-017
October 26, 2006

PROPOSED DRAFT

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Mesquite Power, LLC

Mesquite Generating Station Permit Number V99-017

Including Minor Modifications 12-16-02-03, 4-18-03-01 and 6-25-03-01 July 7, 2003

1-10-05 Version

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 Section 304 of 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:** [County Rule 100 §301] [SIP Rule 3]
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 State Implementation Plan (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).
- 2. CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4(b)]
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.

3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:

[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e]

Any application form, report, or compliance certification submitted under the County 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 the County 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.

4. COMPLIANCE:

A. COMPLIANCE REQUIRED:

- 1) 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 non-compliance 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]

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

- 2) 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.

[County Rule 210 §302.1h(2)]

- 3) 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 County Rule 100.

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

- 4) 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 County Rule 100.

[County Rule 210 §302.1(h)(7)]

B. COMPLIANCE CERTIFICATION REQUIREMENTS:

[County Rule 210 §305.1d]

The Permittee shall file an annual compliance certification 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. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

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

The annual certification shall be filed at the same time as the second semiannual monitoring report required by the Specific Condition section of these Permit Conditions and every 12 months thereafter. Permittee shall submit the certification on a more frequent basis if the permit condition in the "Reporting" section of this permit requires a more frequent submittal.

- C. **COMPLIANCE PLAN:** [County Rule 210 §305.1g]
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 section 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]

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) which:

- A. precisely identifies the information in the permit(s), records, or reports which 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 the claim for trade secrets.

[County Rule 100 §402] [County Rule 200 §411]

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.

[County Rule 100 §402]

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

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: [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]

- 1) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the CAA and incorporated under County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
- 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds under Title IV of the CAA or the regulations promulgated thereunder and incorporated under County Rule 371.
 - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired under the acid rain program and incorporated under County Rule 371, provided that such increases do not require a permit revision under any other applicable requirement.
 - b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.
 - c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the CAA.
 - d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit under County Rule 371:
 - (1) 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.
 - (2) Exceedances of applicable emission rates.
 - (3) The use of any allowance prior to the year for which it was allocated.
 - (4) Violation of any other provision of the permit.

B. ASBESTOS: [40 CFR 61, Subpart M] [County Rule 370 §301.8 - locally enforceable only]

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

C. RISK MANAGEMENT PLAN (RMP): [40 CFR 68]

Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in 40 CFR Part 68, then the Permittee shall submit an RMP by the date specified in 40 CFR Section 68.10 and shall certify compliance with the requirements of 40

CFR 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.

- D. **STRATOSPHERIC OZONE PROTECTION:** [40 CFR 82 Subparts E, F, and G]
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:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices under 40 CFR 82.156.
- 2) 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.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician under 40 CFR 82.161.

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

7. **DUTY TO SUPPLEMENT OR CORRECT APPLICATION:** [County Rule 210 §301.6]
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.

8. **EMERGENCY EPISODES:** [County Rule 600 §302] [SIP Rule 600 §302]
If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302.

9. **EMERGENCY PROVISIONS:** [County Rule 130 §§201 & 402]
An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause 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.

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer, giving notice of the emergency, and submitted 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 fulfills the requirement of County Rule 210 §302.1.e(2) with respect to deviation reporting. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

10. EXCESS EMISSIONS:

[County Rule 140 §§103, 400]

NOTE: There are reporting requirements associated with excess emissions. These requirements are contained in the Reporting section of the General Permit Conditions in a subparagraph called Excess Emissions. The definition of excess emissions can be found in County Rule 100 §200.

- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:
 - 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
 - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
 - 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);
 - 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.
- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:

- 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
 - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
 - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
 - 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
 - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
 - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
 - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- C. Affirmative Defense For Startup And Shutdown:
- 1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
 - a. The excess emissions could not have been prevented through careful and prudent planning and design;
 - b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;

- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
 - e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
 - g. All emissions monitoring systems were kept in operation, if at all practicable; and
 - h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.
- D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph B. of this Permit Condition.
- E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.
- 11. FEES:** [County Rule 200 §409] [County Rule 210 §§302.1i & 401]
The Permittee shall pay fees to the Control Officer under ARS 49-480(D) and County Rule 280.
- 12. MODELING:** [County Rule 200 §407] [locally enforceable only]
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 "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are 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.
- 13. MONITORING / TESTING:**
- A. 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 County Rule 200 §309.

[County Rule 200 §309] [SIP Rule 41]

- B. 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 under the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the applicable Rule, the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 §408] [County Rule 210 §302.1.c] [County Rule 270 §§300 & 400]
[SIP Rule 27]

- C. The owner or operator of a permitted source shall provide, or cause to be provided, performance testing facilities as follows:

- 1) Sampling ports adequate for test methods applicable to such source.
- 2) Safe sampling platform(s).
- 3) Safe access to sampling platforms(s).
- 4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

14. PERMITS:

- A. BASIC:

[County Rule 210 §302.1h(3)]

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.

- B. DUST CONTROL PLAN REQUIREMENTS:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

- 1) The Permittee shall submit to the Control Officer a Dust Control Plan with any permit application that involves earthmoving operations with a disturbed surface area that equals or exceeds 0.1 acre, including both of the following situations:
 - a) When submitting an application for an earthmoving permit involving earth moving operations that would equal or exceed 0.1 acre, and
 - b) Before commencing any routine dust generating operation at the facility.

[County Rule 310 §303.1] [SIP Rule 310 §303.1]

- 2) A Dust Control Plan shall not be required to play on a ball field and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.

[County Rule 310 §303.4] [SIP Rule 310 §303.4]

- 3) Any Dust Control Plan shall, at a minimum, contain all the information described in Sections 303.1, 303.3 and 304 of Rule 310.

[County Rule 310 §§303.1, 303.3 & 304] [SIP Rule 310 §§303.1, 303.3 & 304]

- 4) Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times.

[County Rule 310 §303.2] [SIP Rule 310 §303.2]

C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

- 1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County 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 County Rule 200 §308 and County Rule 210 §§301 & 302.3.

[County Rule 200 §§301 & 308] [County Rule 210 §§301.4a, b, c, & 400]

- 2) 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.

[County Rule 210 §§303.1a, 303.2, 405.4, & 406.4]

- 3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

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

[County Rule 210 §302.1j]

D. POSTING:

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

[County Rule 200 §311]

- 2) If a Dust Control Plan, as required by Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

PROPOSED DRAFT

[County Rule 310 §401] [SIP Rule 310 §401]

- E. PROHIBITION ON PERMIT MODIFICATION: [County Rule 200 §310]
The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

F. RENEWAL:

- 1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. 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 §308 and Rule 210 §§301 & 302.3.

[County Rule 210 §§301.2a, 301.4a, b, c, d, h & 302.3]

- 2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, ARS and County Rules.

[County Rule 200 §§308 & 309] [County Rule 210 §301.1]

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

[County Rule 210 §301.4f]

- 4) 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 by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 §403.2] [County Rule 210 §§301.4f & 301.9]

G. REVISION / REOPENING / REVOCATION:

- 1) 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. 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.

[County Rules 200 §402.1]

Any permit revision required under this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term.

PROPOSED DRAFT

[County Rules 200 §402.1a(1) & 210 §302.5]

- 2) This permit shall be reopened and revised under any of the following circumstances:
 - a) 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.
 - b) 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.
 - c) 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.G.2, shall follow the same procedures as apply to initial permit issuance and shall effect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) This permit shall be reopened by the Control Officer and any permit shield revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

- 4) 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.

[County Rule 210 §302.1h(3)]

H. REVISION UNDER A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

[County Rule 210 §301.2c] [locally enforceable only]

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 is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

I. REQUIREMENTS FOR A PERMIT:

- 1) Air Quality Permit: Except as noted under the provisions 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 County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, 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. If a source 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 permit renewal has been issued or denied.

[County Rule 210 §301.9]

2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee needs to have the routine dust generating activity covered as part of this Permit. Non-routine activities, such as construction, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

3) 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 County Rule 314 §§302.1 and 302.2.

[County Rule 314] [County Rule 200 §306] [SIP Rule 314]

J. RIGHTS AND PRIVILEGES:

[County Rule 210 §302.1h (4)]

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

K. SEVERABILITY:

[County Rule 210 §302.1g]

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.

L. 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.

[County Rule 200 §308]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act (Emergency Orders), including the authority of the Administrator of the USEPA under that section.

- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee under Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]
[County Rule 210 §407.2]

M. TERM OF PERMIT: [County Rule 210 §§302.1a & 402]
This Permit shall remain in effect for no more than 5 years from the date of issuance.

N. TRANSFER: [County Rule 200 §404]
Except as provided in ARS §49-429 and County 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 County Rule 200 and the administrative permit amendment procedures under County Rule 210.

15. RECORDKEEPING:

A. RECORDS REQUIRED: [County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A]
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.

B. RETENTION OF RECORDS:
Unless a longer time frame is specified by these Permit Conditions, information and records required by applicable requirements and copies of summarizing reports recorded by the Permittee and submitted to the Control Officer shall be retained by the Permittee for 5 years after the date on which the information is recorded or the report is submitted
[County Rule 100 §504] [SIP Rule 40 C]

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 for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1d(2)]

C. MONITORING RECORDS: [County Rule 210 §§302.1d(1) & 305.1b]
Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The name of the company or entity that performed the analysis;
- 4) The analytical techniques or methods used;
- 5) The results of such analysis; and
- 6) The operating conditions as existing at the time of sampling or measurement.

- D. **RIGHT OF INSPECTION OF RECORDS:** [County Rule 100 §106] [SIP Rule 40 D]
When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County 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 County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

- A. **ANNUAL EMISSION INVENTORY REPORT:** [County Rule 100 §505] [SIP Rule 40 B]
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 form(s) 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 ARS §49-480.04.

- B. **DATA REPORTING:** [County Rule 100 §502]
When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) 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 subsequently 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.
- C. **DEVIATION REPORTING:** [County Rule 210 §§302.1e & 305.1c]
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. The Permittee shall submit the report to the Control Officer within 2 working days from knowledge of the deviation. The report shall contain a description of the probable cause of such deviations and any corrective actions or preventive 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 also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

D. EMERGENCY REPORTING: [County Rule 130 §402.4]

(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled "Emergency Provisions". Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report.)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency, and submitted 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 action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and volatile organic compounds (VOC) from that source. At a minimum, the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

F. EXCESS EMISSIONS REPORTING: [County Rule 140 §500] [locally enforceable only]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

- 1) The owner and/or operator of any source shall report to the Control Officer any emissions in excess of the limits established by the County or SIP Rules or by these Permit Conditions. The report shall be in two parts as specified below:
 - a) Notification by telephone or facsimile within 24 hours of the time when the owner and/or operator first learned of the occurrence of excess emissions that includes all available information from paragraph 2) of this Permit Condition.

- b) Detailed written notification by submission of an excess emissions report within 72 hours of the notification required by paragraph 1) a) of this Permit Condition.
- 2) The excess emissions report shall contain the following information:
- a) The identity of each stack or other emission point where the excess emissions occurred;
 - b) 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;
 - c) The time and duration or expected duration of the excess emissions;
 - d) The identity of the equipment from which the excess emissions emanated;
 - e) The nature and cause of such emissions;
 - f) 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 malfunctions;
 - g) The steps that were or are being taken to limit the excess emissions; and
 - h) If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction, a list of the steps taken to comply with the Permit procedures.
- 3) In the case of continuous or recurring excess emissions, the notification requirements of this Permit Condition shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in the notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to paragraphs 1) and 2) of this Permit Condition.
- G. OTHER REPORTING: [County Rule 210 §302.1h(5)]
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 of the USEPA along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

The Control Officer, during reasonable hours, for the purpose of enforcing and administering County Rules or any provision of ARS 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.

[County Rule 100 §105]

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:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
[County Rule 210 §305.1f] [SIP Rule 43]
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
[County Rule 210 §305.1f] [SIP Rule 43]
- E. To record any inspection by use of written, electronic, magnetic, and photographic media.
[County Rule 210 §305.1f] [Locally enforceable only]

SPECIFIC CONDITIONS:

Abbreviations and Definitions:

NA (Not Applicable) means that the device does not emit the indicated pollutant.

NS (Not Specified) means that no additional concentration or rate limit is specified for that pollutant and/or device in the underlying applicable requirement

NO_x = nitrogen oxides

CO = carbon monoxide

PM = particulate matter

PM₁₀ = particulate matter less than 10 microns in diameter (unless otherwise stated, PM₁₀ emission limits include both solid (filterable) and condensable particulate matter)

SO₂ = sulfur dioxide

VOC = volatile organic compound

O₂ = oxygen

lb/mmBtu = pounds per million British Thermal Units

ppm = part per million

ppmvd = parts per million by volume dry

Combined Cycle System consists of one combustion turbine with its associated duct burner, one heat recovery generator, post combustion emission control systems, and exhaust stack.

18. ALLOWABLE EMISSION LIMITS:

The allowable emission limits of these Permit Conditions are based upon the facility as currently permitted (refer to Appendix A for a list of major emitting equipment). They do not provide for facility changes or changes in the method of operation that would otherwise trigger applicable requirements including New Source Review, Prevention of Significant Deterioration or Best Available Control Technology.

When multiple or alternative pollutant limits apply, the most stringent limit governs.

A. FACILITY-WIDE EMISSION LIMITS

The Permittee shall not cause, allow, or permit emissions from the devices listed below to exceed the emission limits shown Table 18.1.

**Table 18.1
Rolling Total Emission Limits**

| Device | NO_x Rolling 365-day Total Emission Limit (tons) | CO Rolling 12- month Total Emission Limit (tons) | PM₁₀ Rolling 12-month Total Emission Limit (tons) | SO₂ Rolling 12-month Total Emission Limit (tons) | VOC Rolling 12- month Total Emission Limit (tons) |
|--|---|---|---|--|--|
| GE – Combined Cycle System #1 #2 Combined | 204.0 | 191.8 | 253.2 | 17.6 | 147.5 |
| GE – Combined Cycle System #5 and #6 Combined | 204.0 | 191.8 | 253.2 | 17.6 | 147.5 |
| Cooling Tower #1 | NA | NA | 16.89 | NA | NA |
| Cooling Tower #2 | NA | NA | 16.89 | NA | NA |
| Total for GE Combined Cycle Systems #1, #2, #5 and #6 and Cooling Towers | 408.0 | 384.0 | 540 | 35.0 | 295.0 |

[County Rule 240 §308.1a, d, e]

If at any time the Permittee exceeds the annual emissions limit for NO_x (as calculated on a rolling 365-day basis) set forth in Table 18.1, the Permittee shall comply with the requirements of 40 CFR §52.21(j)-(s) as though construction had not yet commenced on the modification processed as Significant Title V revision #S03-003.

[40 CFR 52.21]

B. COMBINED CYCLE SYSTEM EMISSION LIMITS

- 1) The Permittee shall not cause, allow, or permit emissions from Combined Cycle Systems #1, #2, #5, and #6 during normal operation to exceed the emission limits shown Tables 18.2a and 18.2b.

Table 18.2a
Hourly Emission Limits When a Combined Cycle System Operates in Conditions Other than Startup, Tuning, Testing, or Shutdown (pounds per hour, one-hour average)

| Device | NO _x | CO | PM ₁₀ | SO ₂ | VOC |
|--------------------------|-----------------|------|------------------|-----------------|------|
| Combined Cycle System #1 | 22.2 | 21.6 | 30.4 | 2.1 | 16.6 |
| Combined Cycle System #2 | 22.2 | 21.6 | 30.4 | 2.1 | 16.6 |
| Combined Cycle System #5 | 22.2 | 21.6 | 30.4 | 2.1 | 16.6 |
| Combined Cycle System #6 | 22.2 | 21.6 | 30.4 | 2.1 | 16.6 |

[County Rule 240 §308.1a, d, e]

Table 18.2b
Additional Emission or Concentration Limitations for Each Combined Cycle System During Normal Operation

| Device | NO _x ¹ | CO ¹ | PM ₁₀ Solids (Filterable Alone) | PM ₁₀ Total (Filterable plus Condensable) | VOC ¹ | SO ₂ | Ammonia ¹ |
|------------------------------------|--|--|---|--|--|-----------------|--|
| Each Combined Cycle System Exhaust | 2.5 ppmv corrected to 15% oxygen, dry basis 3-hour rolling average | 4.0 ppmv corrected to 15% oxygen, dry basis 3-hour rolling average | 0.0063 lb/MMBtu 3-hour average ² | 0.0128 lb/MMBtu 3-hour average ² | 5.2 ppmv corrected to 15% oxygen dry basis 3-hour rolling average ² | Not Specified | 10 ppmv corrected to 15% oxygen dry basis 24-hour rolling average ² |

¹Concentration limits are parts per million by volume corrected to 15% oxygen on a dry basis.

² As required by Permit Condition 22.I, compliance with this emission limit is determined using the results of three separate test runs lasting at least one hour.

[County Rule 240, Section 308.1, Subsections a, d, and e]

- 2) **NEW SOURCE PERFORMANCE STANDARDS:** The Permittee shall not cause, allow, or permit emissions from Combined Cycle Systems #1, #2, #5, and #6 to exceed the applicable emission limits of the New Source Performance Standards described below. The emission limits included in Tables 18.2a and 18.2b, the opacity limit of Permit Condition 18.F, and the fuel sulfur content limit included in Permit Condition 19 are at least as restrictive as the New Source Performance Standards. Compliance with the emission limits of Table 18.2a, Table 18.2b, the opacity limit of Permit Condition 18.F, and the fuel sulfur content limit of Permit Condition 19 is sufficient to ensure compliance with the New Source Performance Standards described in Table 18.2c.

Table 18.2c
New Source Performance Standard Limitations For Duct Burners and Combustion Turbines

| Device | Standard | NO _x | SO _x | PM | Opacity |
|--------------|-------------------|--|---------------------------------------|------------------------------------|--|
| Duct burners | 40 CFR 60 Subpart | 1.6 lb per megawatt hour gross energy output (§60.44Da(d)) | 0.2 pounds per million Btu heat input | 0.03 lb per million Btu heat input | 20% (6-minute average), except for one |

| | | | | | |
|------------------------------|-------------------------|--|---|---|--|
| | Da Note 1 | 30-day rolling average or average of three 1-hour tests per §60.48Da(k); 30-day averaging time is based on rolling duct burner operating days | (§60.43Da(b)(2)) 30-day rolling average as per §60.43Da(e) and (g); 30-day averaging time is based on rolling duct burner operating days | (§60.42Da(a)(1)) daily average as per §68.48Da(g)(3) | 6-minute period per hour of not more than 27 percent (§60.42Da(b)) |
| Combustion on Turbines | 40 CFR Subpart GG | Allowable NOx emission percent by volume = $0.0075 \times (14.4/Y) + F$ (15% oxygen, dry basis, may include optional ISO correction per §60.335(b)(1)) Where Y = manufacturer's rated heat rate (kilojoules per watt hour) or actual measured peak rate based on lower heating value of fuel; not to exceed 14.4 kilojoules/watt hour; and F = optional NOx emission allowance for fuel bound nitrogen. (§60.332(a)(1)) Notes 2 and 3 | 0.015% by volume at 15 % oxygen and on a dry basis (§60.333(a)) OR 0.8% by weight total sulfur content in fuel (§60.333(b)) | Not Specified | Not Specified |

Notes for Table 18.2c:

1. According to 40 CFR §60.48Da(c), the particulate matter standard of 40 CFR §60.42Da and the NOx standard of §60.44Da apply to duct burners at all times except during periods of startup, shutdown, and malfunction. A duct burner operating day is defined as a 24-hour period during which fuel is combusted in the duct burner for the entire 24 hours.
2. If Permittee elects to apply a NOx emission allowance for fuel-bound nitrogen, F, from 40 CFR §60.332(a)(1) (shown in Table 18.2c), the definitions and specifications described in 40 CFR §60.332(a)(4), §60.334(h)(2) and (i)(2) or (3) shall be used.
3. The NOx emission limit value for each combustion turbine is calculated according to NSPS Subpart GG 60.332(a)(1) as shown in Table 18.2c. For the purposes of excess emissions and monitoring reports required by 40 CFR

§60.7(c) and Permit Condition 21, an hour of excess emissions is any combustion turbine operating hour in which the 4-hour rolling average NOx concentration exceeds the applicable emission limit listed in Table 18.2c and required by §60.332(a). According to 40 CFR §60.334(j)(1)(iii)(A), a “4-hour rolling average NOx concentration” is the arithmetic average of the average NOx concentration measured by the continuous emission monitoring system for a given hour (corrected to 15% oxygen and, if required under §60.335(b)(1), to ISO standard conditions) and the three combustion turbine operating hour average NOx concentrations immediately preceding that combustion turbine operating hour, per §60.334(j)(1)(iii)(A).

- 3) **STARTUP, SHUTDOWN, TESTING, AND TUNING:** The Permittee shall not cause, allow, or permit emissions from Combined Cycle Systems #1, #2, #5, and #6 during startup, shutdown, testing, and tuning events to exceed the emission limits shown in Table 18.2d. Refer to Permit Condition 19, Operational Requirements Combined Cycle Systems, Startup, Shutdown, Tuning, and Testing, for definitions of startup, shutdown, testing, and tuning and for operational requirements which apply to startup, shutdown, testing, and tuning events.

Table 18.2d
Emission Limits for Each Combined Cycle System During Periods of Startup, Shutdown, Tuning, and Testing

| Event | NO _x (pound per hour, one hour average) | CO (pound per hour, one hour average) | PM ₁₀ (pound per hour, one hour average) | SO ₂ (pound per hour, one hour average) | VOC (pound per hour, one hour average) |
|---------------------------|---|--|--|---|---|
| Startup | 250.0 | 260.0 | 36.0 | 2.0 | 100.0 |
| Shutdown | 200.0 | 100.0 | 36.0 | 2.0 | 34.0 |
| Tuning and Testing | 330.0 | 1050.0 | 36.0 | 2.0 | 200.0 |

Note: The limits in Table 18.2d apply to any hour that contains startup, shutdown, tuning, or testing minutes.

C. COOLING TOWER EMISSION LIMITS:

The Permittee shall not cause, allow, or permit emissions from the cooling towers to exceed the emission limits shown Table 18.3.

Table 18.3
Hourly Emission Limits for Cooling Towers (pounds per hour)

| Device | NO _x | CO | PM ₁₀ | SO ₂ | VOC |
|------------------|-----------------|----|------------------|-----------------|-----|
| Cooling Tower #1 | NA | NA | 3.86 | NA | NA |
| Cooling Tower #2 | NA | NA | 3.86 | NA | NA |

PM₁₀ emissions from the Cooling Tower shall be calculated from the following equation:

$$PM_{10} \text{ Emissions for 8760 hours per year (tons/year)} =$$

Total Recirculation Rate (gallons/minute) * Total Dissolved Solids (TDS) Concentration (milligrams/liter) * 3.45E-09

where:

- 1) 3.45E-09 is a conversion factor for the cooling tower drift rate of 0.0005%, milligrams to tons, liters to gallons, minutes to year, and 31.5% of total particulate as PM₁₀; and
- 2) Total Recirculation Rate is the total for all cells, and
- 3) Total Dissolved Solids is the content of the cooling water

[County Rule 240 §308.1a, d, e]

D. OFFSITE SULFUR DIOXIDES LIMITS:

The Permittee shall not emit into the ambient air any SO₂ 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 the limits shown in Table 18.4.

Table 18.4
Sulfur Dioxide Ambient Concentration Limits

| Concentration of Sulfur Dioxide(micrograms per cubic meter) | Averaging Time (hours) |
|---|------------------------|
| 850 | 1 |
| 250 | 24 |
| 120 | 72 |

[SIP Rule 32F]

E. PARTICULATE MATTER LIMITS (GENERAL):

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

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

where:

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

Q= the heat input in million Btu per hour.

[SIP Rule 31H.1.a]

F. OPACITY LIMITS:

- 1) 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 provided in Rule 300 §302.

[40 CFR §60.42Da] [County Rule 300 §301]

- 2) Except as otherwise provided in Maricopa County 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]

- 4) Fire water pump engine: Permittee shall not discharge into the ambient air from the fire water pump engine, emissions in excess of 20% opacity.

[County Rule 324 §303]

19. OPERATIONAL REQUIREMENTS:

A. FACILITY-WIDE OPERATIONAL REQUIREMENTS:

- 1) 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.

[County Rule 320 §300] [locally enforceable only]

- 2) 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.

[County Rule 320 §302] [locally enforceable only]

- 3) 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.

[County Rule 320 §303] [locally enforceable only]

B. OPERATIONAL REQUIREMENTS FOR THE COMBINED CYCLE SYSTEMS:

- 1) Fuel Restriction:

The Permittee shall combust only pipeline quality natural gas in the Combined Cycle Systems. The annual average sulfur content of the pipeline quality natural gas shall not exceed 0.003 grains per dry standard cubic foot calculated on a 12-month rolling average.

[County Rule 240 §308.1(a), (d), (e)] [County Rule 320 §305; locally enforceable only]

[County Rule 360 §301.40] [40 CFR 60.333(b)]

- 2) Startup, Shutdown, Tuning, and Testing Operational Requirements:

- a) Startup is defined as the period between when a Combined Cycle System is initially started and combustion is indicated until:

- i) System generation reaches "Mode 6". Mode 6 is the turbine operating mode representing advanced dry low NOx combustion with a lean premixed flame condition. Mode 6 is indicated by the GE Mark V control system with a digital signal to the plant Distributed Control System and the CEMS; and

- ii) The inlet temperature to the SCR NOx catalyst region reaches 485°F.

- b) A regular startup is a startup in which the steam turbine reheat bowl temperature is greater than 400 degrees Fahrenheit (205 degrees Centigrade) prior to the initiation of the start. For the purpose of startup emission limit applicability, the total duration of any Combined Cycle System regular startup event shall not exceed five (5) hours, except that the Permittee is allowed two regular starts per calendar year lasting more than 5 hours but not exceeding 8 hours.

- c) An extended startup is defined as a startup in which the steam turbine reheat bowl temperature is less than or equal to 400 degrees Fahrenheit (205 degrees

Centigrade) prior to initiation of the start. For the purpose of startup emission limit applicability, the total duration of any Combined Cycle System extended startup event shall not exceed eight (8) hours, except that the Permittee is allowed two extended starts per calendar year lasting more than 8 hours but not exceeding 10 hours.

- d) Tuning and testing operations include, but are not limited to, periodic tuning of dry low-NOx (DLN) combustors and selective catalytic reduction systems and generator certification testing.
 - e) Shutdown is defined as the period during a Combined Cycle System shutdown sequence beginning when the operator initiates the shutdown of the Combined Cycle System and the control system confirms, via digital signal, that the Combined Cycle System is no longer operating in Mode 6 operation and ending when all combustion has ceased or Mode 6 has been reestablished. In the event of a Combined Cycle System trip or aborted startup, shutdown begins when the combustion turbine drops off Mode 6 operation and ends when all combustion has ceased. Restart of a Combined Cycle System following a Combined Cycle System trip or an aborted startup constitutes a new startup period.
 - f) The Permittee may only conduct tuning or testing activities subject to the emission limits of Table 18.2d, on one combustion turbine at a time (tuning and testing cannot occur at the same time at the facility).
 - g) No more than one combined cycle system may be operated in startup while any other Combined Cycle System is undergoing a tuning or testing activity that is subject to the emission limits of Table 18.2d.
 - h) Tuning and testing operations subject to the emission limits of Table 18.2d shall not exceed 68 hours per calendar year for each combined cycle system. Any portion of an hour in which tuning or testing operations subject to the limits of Table 18.2d are conducted shall be counted toward the 68 hour limit. Hours of tuning and testing which are conducted within the emission limits for normal operation in Tables 18.2a and 18.2b shall not be counted toward the 68 hour limit.
 - i) Only two Combined Cycle Systems can be operated in startup at the same time.
- 3) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Combined Cycle Systems including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[County Rule 360 §301.1] [40 CFR 60.11(d)]

C. SELECTIVE CATALYTIC REDUCTION EMISSION CONTROL SYSTEMS:

- 1) The Permittee shall operate, and maintain without bypass the Selective Catalytic Reduction (SCR) system as part of each Combined Cycle System.

- 2) The Permittee shall comply with the Control Officer-approved Operation and Maintenance (O&M) plan for the SCR systems. Permittee shall revise the O&M plan on an as needed basis or at the direction of the Control Officer. Permittee shall submit all revisions to the Control Officer for approval. Permittee shall at all times comply with O&M plan most recently approved by the Control Officer.
- 3) 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 450°F. Ammonia injection rate monitor requirements are described in the Monitoring and Recordkeeping requirements section of this permit.
- 4) Permittee shall conduct an inspection of the SCR control system at least every 18 calendar months. This inspection shall include the following:
 - a. Inlet and Outlet Ducts: Check for signs of color change
 - b. Reactor: Check for any shift in catalyst layer; check for corrosion; clean, if necessary, any dust adhesion to the catalyst; check for deformation and movement of the sealing device; confirm total sealing systems ; check for deformation and distortion of structures
 - c. Catalyst: Check for deformation of block and catalyst plate; check for dust accumulation and dust plugging; check for dust erosion of catalystIf the inspection, operating data, or emission rate data indicate that the catalyst may not be functioning properly, Permittee shall analyze a sample of the catalyst within 30 days following such indication.

[County Rule 210 §§302.1c(1) and 406]

D. OXIDIZING CATALYST EMISSION CONTROL SYSTEMS:

- 1) The Permittee shall operate, and maintain without bypass the Oxidizing Catalyst system as part of each Combined Cycle System.
- 2) The Permittee shall comply with the Control Officer-approved Operation and Maintenance (O&M) plan for the oxidizing catalyst systems required by this permit. Permittee shall revise the O&M plan on an as needed basis or at the direction of the Control Officer. Permittee shall submit all revisions to the Control Officer for approval. Permittee shall at all times comply with the most recently approved by the Control Officer.
- 3) The maximum temperature of the catalyst shall not exceed 850°F as measured at the SCR inlet.
- 4) Permittee shall conduct an inspection of the oxidizing catalyst control system at least every 18 calendar months. This shall include an inspection of the upstream face of the catalyst to check for debris which would cause obstructions to gas flow or which would resist thermal expansions.
- 5) If the inspection, operating data, or emission rate data indicate that the catalyst may not be functioning properly, Permittee shall analyze a sample of the catalyst within 30 days following such indication.

[County Rule 210 §§302.1c(1) and 406]

E. COOLING TOWERS:

- 1) The cooling towers shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling tower vendor to achieve less than 0.0005 percent drift.

[County Rule 240 §308.1a, d, e]
- 2) The TDS content of the cooling water in the cooling tower shall not contain more than 30,000 milligrams per liter (mg/l) TDS.

[County Rule 240 §308.1a, d, e]

F. FIRE WATER PUMP ENGINE:

- 1) The fire water pump engine shall be used with only commercially available diesel fuel with sulfur content of 0.05 percent by weight or less.
- 2) The Permittee shall operate the fire water pump engine only for emergency conditions or routine maintenance checks.
- 3) Operation of the Firewater Pump Engine shall not exceed 500 hours per consecutive 12-month period.

[County Rule 240, §308.1a, d, e] [40 CFR 52.21(j)] [County Rule 324 §§301.1]

[County Rule 210 §302.1b]

20. MONITORING/RECORDKEEPING REQUIREMENTS:

A. Monitoring and Recordkeeping Requirements for the Combined Cycle Systems:

- 1) The Permittee shall monitor and record the following:
 - a. Hours of operation, operating mode (startup, shutdown, testing/tuning, or normal operation)
 - b. Inlet temperature to the SCR during each startup event
 - c. Duration of each startup, shutdown, tuning, or testing event, based on the applicable definitions included in Permit Condition 19.B.
 - d. Number of regular starts per calendar year which exceed a duration of 5 hours
 - e. Number of extended starts per calendar which exceed a duration of 8 hours
 - f. Steam turbine reheat bowl temperature prior to each start up
 - g. Hours of tuning and testing operation subject to the emission limits of Table 18.2d per calendar year for each combined cycle system
 - h. Any periods during which a continuous monitoring system or monitoring device required by this permit experiences a malfunction or is inoperative
 - i. The amount of natural gas combusted in each of the Combined Cycle Systems during each hour of operation
 - j. Gross electrical energy output of each combustion turbine and steam turbine for each hour of operation

[County Rule 210 §302.1c] [40 CFR §60.7(b)]

- 2) The Permittee shall maintain a file of all of the following:
 - a. Performance testing measurements and results
 - b. All continuous monitoring system performance evaluations
 - c. All continuous monitoring system or monitoring device calibration checks
 - d. All NOx CEMS certification data required by 40 CFR Part 75
 - e. Documentation associated with SCR catalyst inspections
 - f. Documentation associated with inspection of the oxidizing catalyst systems
 - g. Documentation associated with adjustments, maintenance, and repair of selective catalytic reduction and oxidizing catalyst control systems
 - h. Documentation associated with adjustments, maintenance, and repair of NOx and CO CEMS and other monitoring devices required by this permit (e.g., ammonia injection rate monitor, fuel flow meters)
 - i. Occurrence and duration of any malfunction for each Combined Cycle System
 - j. The occurrence and duration of any malfunction of any Air Pollution Control System
 - k. All other information required by 40 CFR 60 and 40 CFR Part 75

[40 CFR §60.7] [40 CFR 75] [40 CFR 64]

[County Rule 210 §302.1(c)]

3) Continuous Emission Monitoring System (CEMS) General Requirements:

- a) Permittee shall operate, maintain, and quality assure CO and NOx continuous emission monitoring systems (CEMS) with an automated data acquisition and handling system for measuring and recording emissions of NOx, diluent (O2 or CO2) and CO for each combined cycle system exhaust. NOx emissions shall be recorded in parts per million by volume dry (ppmvd), pounds per million Btu (lb/MMBtu), and pounds per hour

(lb/hr). Diluent O₂ or CO₂ shall be recorded in percent by volume. CO emissions shall be recorded in ppmvd, and pounds per hour. The CEMS shall be capable of monitoring concentrations and mass emissions during normal operation and during periods of startup, shutdown, tuning and testing. Hourly average CO and NO_x emissions (lb/hr), rolling three-hour average CO and NO_x concentration (ppmvd), rolling four-hour NO_x concentration (percent by volume), rolling 365 day total emission rate for NO_x (tons) and rolling 12-month emission rate for CO (tons) shall be continuously recorded.

[40 CFR Parts 60 and 75] [County Rule 210]

- b) The CEMS shall meet or exceed all applicable design, installation, operational, quality assurance, and all other applicable requirements of this permit.

[40 CFR Parts 60 and 75] [County Rule 210]

- c) The Permittee shall prepare and maintain a monitoring plan in accordance with the requirements of 40 CFR §75.53.

[40 CFR Parts §75.53]

- d) The Permittee shall ensure that the CEMS are in operation and monitoring combined cycle system emissions at all times that the Combined Cycle Systems 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 by 40 CFR 60 and 40 CFR 75.

[40 CFR §60.13(e) and Part 75] [County Rule 210]

- e) The Permittee shall ensure that the design, installation, operation, maintenance, O&M plan, Quality Assurance Plan (QAP) (see Permit Condition 19.B), and on-site spare parts inventory are sufficient to ensure that the CEMS meet the data capture requirements of this permit and 40 CFR Parts 60 and 75.

[40 CFR 60 and 75]

- f) As specified in 40 CFR §60.13(e)(2) during each full combustion turbine operating hour, the continuous emission monitoring system (NO_x and CO CEMS) must be capable of completing a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute interval, to validate an hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.

[40 CFR §60.13(e)(2)] [40 CFR §60.334(b)(2)]

- g) Monitor Malfunction, Downtime, and Percent Monitor Availability:

- i) Malfunctions of the CEMS shall be recorded and reported as required under 40 CFR Parts 60 and 75 and under the recordkeeping and reporting requirements of this permit. The duration of monitor downtime and the duration of CEMS measurement range exceedances are to be minimized at all times and especially during startup, shutdown, tuning, and testing events.

[40 CFR §60.13(e) and Part 75] [County Rule 210]

- ii) A period of monitor downtime shall be any Combined Cycle System operating hour in which sufficient data are not obtained to validate the hour for CO or either NO_x Concentration or oxygen (diluent) or both.

[County Rule 210 §302.1.c.1] [40 CFR 60.7(b)]

iii) For the NO_x CEMS, Permittee shall determine NO_x percent monitor data availability according to 40 CFR §75.32.

[40 CFR §60.334(j)(1)(iii)(B)] [40 CFR §75.32]

h) All excess emissions shall be converted into units of the NO_x and CO limits included in this permit. After conversion into units of the limit, the data may be rounded to the same number of significant digits as used in the applicable limit.

[40 CFR §60.13(h)]

i) The NO_x and CO CEMS must obtain valid data for at least 18 of every 24 hours in at least 22 of every 30 consecutive days of operation.

[County Rule 210 §302.1c(2)] [County Rule 360]

[40 CFR §64.6]

j) The permittee is allowed 90 days following issuance of this permit to comply with any new monitoring requirement(s). During the 90-day transition period, Permittee shall continue to comply with the monitoring requirements of the previous permit until each corresponding new requirement is met. Permittee shall notify the Control Officer in writing by mail when all new monitoring requirements have been met.

[County Rule 210 §302.1c(2)]

B. QUALITY ASSURANCE AND QUALITY CONTROL OF CEMS

1) O&M Plans and Quality Assurance Plans (QAPs) for NO_x and CO CEMS:

a) Permittee shall maintain a County-approved O&M plan(s) for the NO_x and CO CEMS required by this permit. The Permittee shall make available for inspection, the approved O&M plan for each CEMS. The O&M plans shall be in a format acceptable to the Control Officer and shall specify applicable operating parameters necessary to ensure continuous and accurate emissions monitoring.

b) Permittee shall maintain a County-approved QAP(s) for the NO_x and CO CEMS required by this permit. The Permittee shall make available for inspection, the approved QAP for the CEMS. The QAPs shall be in a format acceptable to the Control Officer and shall specify quality assurance procedures needed to ensure that the data provided by the CEMS is accurate. The QAPs shall address quality assurance and quality control procedures required by this permit, 40 CFR 60 and 40 CFR 75 Subpart C and Appendix B (for NO_x CEMS).

2) A combined O&M plan and QAP for the CEMS may be submitted.

3) The Permittee shall at all times comply with the currently approved version of the O&M plan and QAP.

4) Additional quality assurance requirements are addressed under the specific monitoring and recordkeeping requirements for the CO and NO_x CEMS.

5) The Permittee shall develop and implement daily, monthly, quarterly, and annual maintenance checklists to ensure proper operation and accuracy of the NO_x and CO CEMS. The checklists shall be established as part of the O&M plan and/or QAP.

6) The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times, and that they meet the specifications of 40 CFR Parts 60 and 75, as applicable, including the certification requirements of 40 CFR §75.20.

- 7) The Permittee shall re-calibrate the NO_x or CO CEMS (as applicable) after any maintenance activity that could affect the system calibration.
- 8) Permittee shall re-certify the NO_x CEMS as required by and within the time periods required by 40 CFR 75.20(b). According to 40 CFR §75.20(b), such re-certification is required whenever the Permittee makes a replacement, modification, or change in the certified continuous emission monitoring system that may significantly affect the ability of the system to accurately measure or record the NO_x emission rate or concentration, or to meet the requirements of §75.21 of 40 CFR 75 Appendix B. Furthermore, whenever the Permittee makes a replacement, modification, or change to the flue gas handling system or the combined cycle system operation that may significantly change the flow or concentration profile, the Permittee shall recertify the monitoring system according to the procedures in 40 CFR §75.20(b).

[County Rule 210 §302.1c(1)] [40 CFR 60 Subpart A and Appendix F]
[40 CFR 75 Subparts A, B, C, Appendix A, Appendix B]

C. NO_x CONTINUOUS EMISSION MONITORING:

- 1) Permittee shall maintain, calibrate, certify, and operate a CEM for each of the Combined Cycle System exhaust stacks to continuously measure the NO_x and O₂ or CO₂ content of the exhaust stream in accordance with the following requirements:
 - a) Monitoring Provisions of 40 CFR 75 Subpart B, including the General Operating Requirements of 40 CFR §75.10, and the Specific Provisions for Monitoring NO_x Emission Rates of 40 CFR §75.12
 - b) Operation and Maintenance requirements of 40 CFR 75 Subpart C
 - c) Missing data substitution requirements of 40 CFR 75 Subpart D
 - d) Alternative monitoring system requirements of 40 CFR Subpart E (as applicable)
 - e) Recordkeeping requirements of 40 CFR 75 Subpart F
 - f) Reporting requirements of 40 CFR 75 Subpart G
 - g) 40 CFR 75, Appendix A, "Specifications and Test Procedures"
 - h) 40 CFR 75, Appendix B, "Quality Assurance and Quality Control Procedures" including, at a minimum:
 - i. Daily assessments under Section 2.1
 - ii. Quarterly assessments under Section 2.2
 - iii. Semiannual and annual assessments under Section 2.3
 - iv. Recertification, Quality Assurance, Relative Accuracy Test Audit Frequency, and Bias Adjustment Factors (special considerations) under Section 2.4
 - v. Other audits as required under Section 2.5
 - i) 40 CFR 75, Appendix C, "Missing Data Estimation Procedures"
 - j) 40 CFR 75, Appendix F, "Conversion Procedures"
 - k) Combustion turbine monitoring provisions of 40 CFR §60.334
[40 CFR 75] [40 CFR §60.334]
- 2) Notwithstanding the provisions of Condition 20.C.1, NO_x CEMS meeting alternative performance specification or QA/QC exemption criteria in 40 CFR Part 75 shall meet the requirements of 40 CFR Part 60 as specified below:
 - a) Calibration Error: Monitors with span values less than or equal to 50 ppm utilizing the alternative 5 ppm performance specification in 40 CFR Part 75 shall meet the

Calibration Drift performance specification and QA/QC requirements of 40 CFR 60 Appendix B: Performance Specification 2 (PS-2) and Appendix F.

- b) Linearity: Monitors with span values less than or equal to 30 ppm exempted from linearity check requirements under 40 CFR Part 75 and monitors utilizing the alternative 5 ppm difference linearity performance specification in 40 CFR Part 75 shall meet the Cylinder Gas Audit (CGA) or Relative Accuracy Audit (RAA) requirements of 40 CFR 60 Appendix F.
- c) Relative Accuracy Test Audit (RATA): Monitors utilizing the alternative 0.020 lb/MMBtu RATA performance specification in 40 CFR Part 75 shall meet the Relative Accuracy performance specifications and RATA requirements of 40 CFR 60 Appendix F.

[40 CFR 60 and 40 CFR 75]

D. CO CONTINUOUS EMISSION MONITORING:

- 1) For the CO CEMS, the Permittee shall meet the requirements of 40 CFR Part 60, including but not limited to the following:
 - a) 60.13 – Monitoring Requirements as follows:
 - i) Each CEMS for CO must be operated in accordance with the requirements of Performance Specification (PS) 4a of 40 CFR 60, Appendix B.
 - ii) Each CEMS for CO must meet the requirements of 40 CFR 60 Appendix F, Quality Assurance Procedures.;

[40 CFR §60.13] [County Rule 210 §302.1c(2)]

- 2) As per 40 CFR 60.13(d)(1), Permittee shall automatically check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily for the CO CEMS. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of 40 CFR 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

[40 CFR §60.13(d)(1)]

- 3) One-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of CEMS breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this Permit Condition. Hourly average values during hours containing calibration or QA periods shall be computed from two or more data points over each 1-hour period.

[40 CFR §60.13(h)]

- 4) The Permittee shall maintain the CO CEMS by conducting the following:
 - a. Calibration Drift Assessment: Conducted at least once daily and following the procedures specified in 40 CFR Appendix F, Section 4.
[40 CFR 60 Subparts A and Appendix F]
 - b. Data Accuracy Assessment: Each CEMS must undergo an accuracy audit according to the requirements of 40 CFR 60 Appendix F, Section 5, at least once per calendar quarter. Successive audits are to occur no closer than 2 months. The data accuracy assessment shall include:

- i. Relative Accuracy Test Audit (RATA) conducted once per four quarters
 - ii. Cylinder Gas Audit conducted in three of four quarters but in no more than three quarters in succession
- 5) Calculations for CEMS data accuracy included in 40 CFR 60 Appendix F Section 6 shall be used as applicable for data accuracy assessment
[40 CFR 60 Subparts A and Appendix F]
- 6) For the CO CEMS, the Quality Assurance Plan required by this permit shall address the applicable requirements of 40 CFR 60 Appendix F, including:
 - c. Calibration of the CEMS as required in 40 CFR Appendix F
 - d. Calibration Drift determination and adjustment of the CEMS
 - e. Preventive maintenance of CEMS (including spare parts inventory)
 - f. Data recording and calculations
 - g. Semiannual Reporting as required by 40 CFR 60 Appendix F, Section 7
 - h. Accuracy audit procedures including sampling and analysis methods
 - i. Program of corrective action for malfunctioning CEM
[40 CFR 60 Subparts A and Appendix F]
- 7) As described in Section 5.2 of 40 CFR 60 Appendix F, whenever excessive inaccuracies occur for two consecutive quarters, the Permittee must revise the current QAP or CEMS Operation and Maintenance Plan procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.
[40 CFR 60 Subparts A and Appendix F]
- 8) COMPLIANCE ASSURANCE MONITORING (CAM) FOR VOCS FROM THE COMBINED CYCLE SYSTEMS
 - a) Indicators of Performance and Devices: The Permittee shall use the CO CEMS to ensure that the oxidizing catalyst is functioning properly and therefore, to provide a reasonable assurance that the VOC emission limits contained in Tables 18.1, 18.2a, and 18.2b are met.
[40 CFR §64.6(c)(1)(i) and (ii)]
 - b) Performance Requirements: The CO CEMS shall satisfy the requirements of 40 CFR §60.13 Appendix B (Performance Specification 4A) and the requirements of Permit Conditions 20.A, 20.B and 20.D.
[40 CFR §64.6(c)(1)(iii)]
 - c) An excursion of the VOC emission limits included in Tables 18.1, 18.2a, and 18.2b is defined as any exceedance of the CO emission limits included in Tables 18.1, 18.2a, and 18.2b. For Table 18.1, any exceedance of the rolling 12-month CO limit is deemed to be an excursion of the rolling 12-month VOC limit. For Table 18.2b, an exceedance of the 3-hour rolling average CO concentration limit is deemed to be an excursion of the 3-hour average VOC limit. A VOC emission rate, detected using the performance test methods described for VOC in Permit Condition 22, which exceeds the VOC emission limits included in Tables 18.1, 18.2a, or 18.2b is defined as an exceedance of the associated limit.
[40 CFR §64.6(c)(2)]

- d) **Obligation to conduct monitoring:** Permittee shall conduct monitoring using the CO CEMS to provide a reasonable assurance of compliance with the VOC emission limits in Tables 18.1, 18.2a, and 18.2b. In addition, permittee shall fulfill the other obligations specified in 40 CFR §64.7 through §64.9, including the following:
- i) *Commencement of operation.* The permittee shall conduct the CO monitoring required under Permit Condition 20.A.
 - ii) *Proper maintenance.* At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. Maintenance requirements for the CO monitoring equipment are included in Permit Conditions 20.A, B.
 - iii) *Continued operation.* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the associated combined cycle system is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this permit condition and 40 CFR Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement for the CO CEMS. The permittee shall use all the data collected during all other periods in assessing the operation of the oxidizing catalyst and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
 - iv) *Response to excursions.* Upon detecting an excursion of the VOC limit, the permittee shall restore operation of the combined cycle system (including the oxidizing catalyst and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. At a minimum, investigation of the excursion's cause shall begin immediately upon discovering the excursion. The response shall include minimizing the period of any excursion and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the CO emission limits included in Tables 18.1, 18.2a and 18.2b, as applicable. Determination of whether the permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the combined cycle system. When the emission rate or concentration of CO is reduced to within the emission limits included in

Tables 18.1, 18.2a, and 18.2b, following an excursion, there is no longer an excursion of the VOC limit.

- v) *Documentation of need for improved monitoring.* If the permittee identifies a failure to achieve compliance with a VOC emission limitation or standard for which the approved monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR §64.6(c)(3) and §64.7]

- vi) Minimum data availability: The CO CEMS shall meet the minimum data collection requirement in Permit Conditions 20.A.3.f. In addition, the CO CEMS shall meet the minimum data availability requirements in Permit Conditions 20.A.3.j.

[40 CFR §64.6(c)(4)]

E. EMISSION RATE AND COMPLIANCE DEMONSTRATION MONITORING AND RECORDKEEPING REQUIREMENTS

- 1) For the purpose of calculating mass emissions and demonstrating compliance with NO_x mass emissions limits in Table 18.1 (rolling total emission limits), the Permittee shall
 - a) use the missing data substitution procedures 40 CFR 75 Subpart D and Appendix C or
 - b) shall estimate missing NO_x emissions data by assuming that the combined cycle system emission rate was equal to the applicable pound-per-hour emission limit for NO_x included in Table 18.2a for normal operation or Table 18.2d for startup, shutdown, testing, and tuning.
- 2) For the purpose of calculating mass emissions and demonstrating compliance with CO mass emission limits in Table 18.1, the Permittee shall use one of the following methods in order to estimate emissions of CO during periods when CO CEMS data is not available (or is not accurate):
 - a) Estimate missing CO emissions data using the missing data estimation and substitution procedures prescribed for NO_x under 40 CFR 75 Subpart D and Appendix C. This requires the permittee to calculate CO mass emission rates using the procedures for NO_x emission rate determination included in 40 CFR 75 Appendix F.
 - b) Estimate missing CO emissions by assuming that the combined cycle system emission rate was equal to the applicable pound-per-hour emission limit for CO included in Table 18.2a for normal operation or Table 18.2d for startup, shutdown, testing, and tuning

[County Rule 210 §302.1.c] [County Rule 371] [40 CFR 75 Subpart D]

- 3) The Permittee shall calculate SO₂ mass emissions using the measured fuel flow rate, the fuel gross caloric value, and the procedures in 40 CFR 75 Appendix D.
[County Rule 210 §302.1.c] [County Rule 371] [40 CFR Part 75 Appendix D]
- 4) VOC emissions from the combined cycle systems during normal operating conditions shall be calculated using the emission calculation methodology contained in the Permit Application associated with issuance of this permit, or results of the most recently approved VOC emission test. An alternative emission rate can be used if it is demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.
[County Rule 210 §302.1.c]
- 5) PM10 emissions from the Combined Cycle Systems during all operating conditions shall be calculated using the emission calculation methodology contained in the Permit Application associated with issuance of this permit or the results of the most recently approved PM10 emission test. An alternative emission rate can be used if it is demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.
[County Rule 210 §302.1.c]
- 6) The Permittee shall monitor and record emissions from the Combined Cycle Systems in units and averaging times consistent with all emissions limits contained in Permit Conditions 18.A and B. Rolling 365-day total NO_x emissions shall be calculated daily using the data from the most recent 365 calendar days, with a new 365-day total period beginning each calendar day. Rolling 12-month total CO emissions shall be calculated monthly, by the 15th day after the end of each month, using the CEMS data from the most recent 12 months, with a new 12-month period beginning each calendar month.
[County Rule 210 §302.1.c]
- 7) By the 30th day after the end of each month, the Permittee shall record the 12 month rolling total VOC, PM10, and SO₂ emission rates in terms of tons per year for the most recent 12-month period. When calculating annual emission totals for these pollutants, Permittee shall account for emissions which occurred during startup, shutdown, testing, and tuning, as follows:
 - b) Estimate emissions by assuming that the emission rate was equal to the applicable startup, shutdown, testing/tuning emission limit in Table 18.2d.
 - c) Estimate emissions using fuel flow and if applicable, natural gas sampling data; the Control Officer must accept the calculation methodology.

F. FUEL MONITORING

- 1) NATURAL GAS SULFUR CONTENT MONITORING: The Permittee shall monitor for compliance with the fuel sulfur content limit of this permit by obtaining and recording the sulfur content of the pipeline quality natural gas used in the Combined Cycle Systems using the following custom monitoring schedule:
 - a. The Permittee shall monitor sulfur content of the pipeline quality natural gas at least once every calendar quarter.
 - b. If at any time a fuel sulfur analysis indicates noncompliance with the fuel sulfur limit of this Permit, the Permittee shall notify the Administrator and the Control Officer of such excess emissions within one week of the analysis.

- c. In the event of such noncompliance, the Permittee shall conduct fuel sulfur monitoring weekly until notified by the Administrator and the Control Officer that less frequent monitoring is acceptable.
- d. The Permittee shall determine compliance with the sulfur content limit in this Permit by using American Society of Testing and Materials (ASTM) Method D1072-80, 90, ASTM Method D3246-81, 92, 96, ASTM Method D4468-85, or ASTM Method D6667-01 either at the site or upstream or downstream of the site. If the applicable ranges of these ASTM methods are not adequate to measure the levels of sulfur, dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator and the Control Officer.
- e. Alternatively, a Fuel Supplier Agreement may be used to monitor for compliance with the 40 CFR 60, Subpart GG fuel sulfur content limit of this permit and meet the monitoring requirements of 40 CFR §60.334(h)(3)(i). For this alternative, Permittee shall maintain a current, valid purchase contract, tariff agreement, or transportation contract between Permittee and the fuel supplier which demonstrates that the fuel meets the definition of natural gas in 40 CFR §60.331(u) (maximum total fuel sulfur content of 20.0 grains per 100 standard cubic feet).

[County Rule 210 §302.1c(2)] [40 CFR §60.334(h)(3)]

2) NATURAL GAS FLOW AND HEATING VALUE MONITORING:

- a. The Permittee shall maintain, calibrate, certify, and operate natural gas fuel flow meters on each of the combustion turbines and each of the duct burner systems. The fuel flow monitors shall meet or exceed specifications contained in 40 CFR 75 Appendix D. The output of the fuel flow meters shall be automatically recorded with a data acquisition and handling system.
- b. The Permittee shall obtain and record the Gross Caloric Value of the natural gas used in the Combined Cycle Systems as required by 40 CFR Part 75, Appendix D at least once per month in accordance with the procedures in Section 2.3.4.1 or 2.3.4.2 of 40 CFR Part 75 Appendix D, as applicable.

[40 CFR 75 Appendix D]

[40 CFR 75 Appendix D]

3) DIESEL FUEL MONITORING AND RECORDS: The Permittee shall keep all the records of the fuel supplier certification for the diesel fuel being combusted for at least five years. The supplier certification shall include:

- a. the name of the supplier,
- b. the date that the fuel was delivered to the site, and
- c. a statement that the fuel does not exceed 0.05 percent sulfur, by weight.

[County Rule 320] [County Rule 210 §302.1c] [SIP Rule 32]

G. AIR POLLUTION CONTROL SYSTEM MONITORING

- 1) SCR MONITORING: The Permittee shall maintain, certify, and operate on each SCR system monitors to measure the ammonia injection rate. The flow meters used to measure the injection rate shall be sampled by a data acquisition system at a frequency of no less than once every 15 minutes and averaged into rolling 24 hours periods. These

data shall be recorded and will be used to verify compliance with the ammonia emission limits of Table 18.2b and the emissions testing requirements of Table 22.1.

The Permittee shall demonstrate compliance with the minimum SCR inlet temperature for ammonia injection by maintaining records showing whether ammonia has been injected into the SCR when the temperature is below 450°F as specified in Permit Condition 19.C. This can be done through alarm system or temperature monitoring records.

Permittee shall monitor the inlet temperature to the SCR NOx catalyst region to determine when the temperature reaches 485°F. This is the temperature at which the emission limits for Startup included in Table 18.2d cease to apply.

[County Rule 210 §302.1c]

2) **OXIDIZING CATALYST MONITORING:**

Permittee shall demonstrate compliance with the maximum oxidizing catalyst temperature limit of 850°F specified by Permit Condition 19.D.3, by monitoring and recording the SCR inlet temperature.

[County Rule 210 §302.1c]

H. **COOLING TOWER MONITORING:**

1) Each month, the Permittee shall inspect the Wet Cooling Tower drift eliminators for proper installation, maintenance, and operation. The results of the inspection shall be recorded in a facility log.

[County Rule 210 §302.1c]

2) Each month, the Permittee shall calculate the total emissions of PM10 in tons for the most recent 12-month period, with a new 12-month period beginning on the first day of each calendar month.

[County Rule 210 §302.1c]

3) The Permittee shall daily monitor and record the conductivity of the cooling tower water and shall monthly monitor and record the TDS content of the cooling tower water.

[County Rule 210 §302.1c]

I. **STARTUP and SHUTDOWN PLAN FOR THE COMBINED CYCLE SYSTEMS:** Within 90 days following issuance of this permit, Permittee shall develop, maintain on site, and follow a written startup and shutdown plan for the combined cycle systems which includes manufacturer's recommended operating practices and good engineering practices for startup and shutdown of the combined cycle systems and emission control systems.

[County Rule 210 §302.1c] [County Rule 240 §308.1.a, d, and e] [40 CFR §52.21(j)]

J. **FIRE WATER PUMP ENGINE:** The Permittee shall record the actual hours of operation and the explanation for use of the fire water pump engine and the nature of the emergency or maintenance check that caused the engine to be used. The Permittee shall monthly calculate the rolling 12-month total hours of operation. In addition, the Permittee shall keep a record that includes an initial one-time entry that lists the fire water pump engine combustion type,

manufacturer, model designation, rated brake horsepower, serial number and the location of the engine on site.

[County Rule 210 §302.1c] [County Rule 324 §502.1 and §502.4]

K) **VISIBLE EMISSIONS AND OPACITY MONITORING**

- 1) The Permittee shall conduct a monthly visual inspection of emissions from the diesel fueled fire water pump engine, during operation. 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 300] [County Rule 210§302.1c]
- 2) The permittee shall monitor for compliance with the particulate matter emission limits of this permit by conducting a visual inspection of the stack emissions from each combined cycle system and from the cooling towers during each week of operation that the equipment was used more than 10 hours. 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 Rules 300] [County Rule 210 §302.1c]
- 3) If visible emissions, other than uncombined water, are observed being discharged into the ambient air, the Permittee shall monitor for compliance with the opacity standards specified in this permit by having a certified visible emissions evaluator determine the opacity of the visible emissions being discharged into the ambient air using the techniques specified in EPA Reference Method 9.

If the Permittee has not received either a compliance status notification or notice of violation regarding an opacity standard in the 12 months preceding the observation of visible emissions, the initial Method 9 opacity reading shall be taken within three days of observing visible emissions. If the Permittee has received either a compliance status notification or notice of violation regarding an opacity standard in the 12 months preceding the observation of emissions, the initial Method 9 opacity reading shall be taken within one day of observing visible emissions. If the emitting equipment is not operating on the day that the initial Method 9 opacity reading is required to be taken, then the initial Method 9 opacity reading shall be taken the next day that the emitting equipment is in operation. If the problem causing the visible emissions is corrected before the initial Method 9 opacity reading is required to be performed, and there are no visible emissions (excluding uncombined water) observed from the previously emitting equipment while the equipment is in normal operation, the Permittee shall not be required to conduct the Method 9 opacity readings.

Follow-up Method 9 opacity readings shall be performed by a certified visible emissions evaluator while the emitting equipment in its standard mode of operation in accordance with the following schedule:

- a) Daily:

- i) Except as provided in paragraph c of this Permit Condition, a Method 9 opacity reading shall be conducted each day that the emitting equipment is operating until a minimum of 14 daily Method 9 readings have occurred.
- ii) If the Method 9 opacity readings required by this Permit Condition are less than 20% for 14 consecutive days, the frequency of Method 9 opacity readings may be decreased to weekly, in accordance with paragraph b of this Permit Condition.
- b) Weekly:
 - i) If the permittee has obtained 14 consecutive daily Method 9 readings which do not exceed 20% opacity, the frequency of Method 9 readings may be decreased to once per week for any week in which the equipment is operated.
 - ii) If the opacity measured during a weekly Method 9 reading exceeds 20%, the frequency of Method 9 opacity readings shall revert to daily, in accordance with paragraph a of this Permit Condition.
 - iii) If the opacity measured during the required weekly Method 9 readings never exceeds 20%, the Permittee shall continue to obtain weekly opacity readings until the requirements of paragraph c of this Permit Condition are met.
- c) Cease Follow-up Method 9 Opacity Monitoring:
Regardless of the applicable monitoring schedule, follow-up Method 9 opacity readings may cease if the emitting equipment, while in its standard mode of operation, has no visible emissions, other than uncombined water, during every Method 9 opacity observation taken for two weeks.

[County Rule 210 §302.1c]
- 4) The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:
 - a) The date and time the visible emissions observation or Method 9 opacity reading was taken;
 - b) The name of the observer;
 - c) Whether or not visible emissions were present;
 - d) If visible emissions are present and the controls and facility processes are operating in a mode other than their normal operating conditions, such as startup or shutdown, a description of the operating conditions at the time that the opacity is observed;
 - e) If visible emissions were present, the identity of the equipment or process with the visible emissions,
 - f) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions;
 - g) If applicable, a description of any corrective action(s) taken, including the date of such action(s); and
 - h) Any other related information.

[County Rule 300] [County Rule 210 §302.1]

4) Opacity Readings

- a) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.
[40 CFR 60.11.b] [County Rule 300 §501]
 - b) Opacity of visible emissions from intermittent sources as defined by County Rule 300 §201 shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 25 consecutive readings shall be required at 15-second intervals for the averaging time.
[County Rule 300 §502] [locally enforceable only]
- L. ODOR LOG: The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.
[County Rule 320] [County Rule 210 §302.1] [SIP Rule 32]

21. REPORTING REQUIREMENTS:

A. GENERAL REPORTING REQUIREMENTS: The Permittee shall file a written notice with the Control Officer as described in 40 CFR 60.7 as follows:

1) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under 40 CFR 60.14(e). This notice shall be postmarked within 60 days or as soon as commenced and shall include information describing the precise nature of the change, present and proposed emissions control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.

[40 CFR §60.7(a)(4)]

2) Notifications required by this Permit Condition shall be sent to the Control Officer and the Administrator of the USEPA.

[County Rule 360 §302.1] [40 CFR 60.7(a)]

B. REPORTING REQUIREMENTS FOR COMBINED CYCLE SYSTEMS

The Permittee shall submit CO and NOx excess emissions and monitoring systems performance reports and/or summary report on a semiannual basis as required by 40 CFR 60.7(c) and (d), unless more frequent reporting is specifically required by an applicable subpart.. The Permittee may reduce the frequency of reporting in accordance with the provisions in 60.7(e). Excess Emissions and Monitoring Reports shall, at a minimum, include:

- a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, of the carbon monoxide emission limit in Tables 18.1, 18.2a, 18.2b, and 18.2d and the corrective actions taken.
- b) Summary information on the number, duration and cause (including unknown cause, if applicable) of exceedances of the NOx emission limit in Tables 18.1, 18.2a, 18.2b, and 18.2d and the corrective actions taken.
- c) Summary information on the number, duration and cause (including unknown cause, if applicable) for carbon monoxide CEMS downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).
- d) Summary information on the number, duration and cause (including unknown cause, if applicable) for NOx CEMS downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).

The Permittee shall submit reports of emissions of NOx which exceed the combustion turbine NSPS emission limitations described in this permit and monitor downtime for the NOx CEMS, in accordance with and in the manner described in under the general reporting requirements of 40 CFR §60.334(j). In addition, the Permittee shall report any exceedance of the natural gas fuel sulfur content limit included in the Table 18.2c. Reports required by this permit condition are to be submitted on the same schedule as specified in the general reporting requirements of this permit. Excess emissions shall be reported for all periods of combustion turbine operation, including startup, shutdown and malfunction.

[County Rule 360 §301.1] [40 CFR §60.7(a), (c), (d), & (e)] [40 CFR §60.334] [40 CFR 64.3(d)(3)]

C. SEMIANNUAL COMPLIANCE AND SEMIANNUAL MONITORING REPORT:

1) Semiannual Compliance Certification and Monitoring Report: The Permittee shall submit a single semiannual report which encompasses both the annual compliance certification and the semiannual monitoring report. The combined report shall be submitted on a semiannual basis. The Permittee shall file the Semiannual Compliance Certification and

Monitoring Report with the Control Officer, Attn: Large Source Compliance Supervisor and with the Administrator of the USEPA. If this report is filed in accordance with the requirements of this permit condition, a separate annual compliance certification is not required. The reporting schedule is as follows:

| Report | Reporting Period | Report Due Date |
|---|--|--|
| Final Compliance and Monitoring report and Semiannual Compliance Certification which reflects the requirements in the previous permit | From the end of the previous reporting period to the issuance date of this permit | Report is due by July 30th or January 30th, whichever is the earlier date following issuance of this permit. |
| Initial Semiannual Compliance Certification and Monitoring Report which reflects the requirements of this permit | Permit issuance date until December 31st or June 30 th , whichever is earlier | Report is due within 30 days following the end of the month following the reporting period |
| Subsequent Semiannual Compliance Certification and Monitoring reports | Six month periods ending on June 30 th and December 31 st | Reports are due within 30 days following the end of the month following the reporting period |

- 2) The Semiannual Compliance Certification and Monitoring report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The Semiannual Compliance Certification and Monitoring report shall be on a form supplied or approved in advance by the Control Office, if available. According to County Rule 210, Section 305.1(d) each permittee shall submit a compliance certification at least annually. This annual requirement is met through both semiannual reports required by this permit with a full year completed upon submittal of the report associated with the July 1st to December 31st reporting period. The Semiannual Compliance Certification and Monitoring report shall contain the following information at a minimum:
- a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The compliance status
 - c) Whether compliance was continuous or intermittent
 - d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

- e) Other facts as the Control Officer may require to determine compliance status of the source.
- f) Each report shall cover all instances of deviations from these permit conditions during the reporting period, the cause of the deviations if any were present, and any applicable corrective actions taken.
- g) The Permittee shall include a copy of the portion of the odor log which covers the applicable 6 month reporting period in each of the semiannual compliance reports. If no complaints were received during the reporting period, a statement to that effect may be substituted for the copy of the odor log.
- h) Permittee shall comply with applicable reporting requirements for support operations including spray coating (Permit Condition 24), architectural coatings (Permit Condition 25), dust generating activities (Permit Condition 26), abrasive blasting (Permit Condition 27), and cold degreasing and wipe cleaning activities (Permit Condition 28).

[County Rule 210 §302.1(e)(1), 305.1(c) , and 305.1(d)]

[County Rule 210 §302.1(e)(1)]

D. VISIBLE EMISSIONS REPORTING

The Permittee shall include the following in each semi-annual Compliance and Monitoring Report required above:

- 1) If any visible emissions observation or Method 9 opacity reading required by these permit conditions was not performed, notification of the time span(s) when the requirements were not met, the reason why the observation or reading was not performed and, if applicable, any corrective actions taken to assure that any required observations and readings are taken in the future.
- 2) If visible emissions are identified during a visual observation, the following information shall be included in the report:
 - a) Date and time when visible emissions were observed;
 - b) Name of the observer;
 - c) Identity of the equipment or process with the visible emission,
 - d) If applicable, a description of any abnormal operating conditions at the time such as start up, shutdown or malfunction.
 - e) A description of any corrective actions taken, including the date such action was taken, and
- 3) If a Method 9 emission reading is required to be taken by these permit conditions, the following information shall be included in the report:
 - a) Date and time when visible emissions were observed;
 - b) The name of individual certified as a visible emissions evaluator, the date of last certification, and company/agency providing the certification
 - c) Identity of the equipment or process with the visible emission,
 - d) If applicable, a description of any abnormal operating conditions at the time such as start up, shutdown or malfunction.
 - e) A copy of the results
 - f) A description of any corrective actions taken, including the date such action was taken, and

[County Rules 210 §302.1e]

- E. **REPORTING REQUIRED BY 40 CFR 75:** In accordance with 40 CFR Part 75 Subpart G, the Permittee shall electronically report to the Control Officer and the USEPA the data and information as required by 40 CFR 75.64 on a quarterly basis. Quarterly submittals shall include facility data, Combined Cycle System emission data, monitoring data, control equipment data, monitoring plans and quality assurance data and results.

[40 CFR 75 Subpart G] [County Rule 210] [County Rule 371]

- F. **TUNING AND TESTING NOTIFICATION:** Permittee shall notify the Control Officer at least 24 hours before any scheduled tuning or testing event which is anticipated to be subject to the emission limits of Table 18.2d. Notification shall be in written format, and if submitted by facsimile, shall be followed by mailed copy.

[County Rule 240 §308.1a, d, e] [County Rule 210]

22. TESTING REQUIREMENTS:

A. SPECIFIC TESTING REQUIREMENTS FOR THE COMBINED CYCLE SYSTEMS:

- 1) The Permittee shall measure emission concentrations and emission rates (as applicable) to determine compliance with the emission limits of Permit Condition 18 by conducting stack emissions tests as specified Table 22.1. Refer to Permit Conditions 20.C and 20.D for RATA requirements which apply to NO_x and CO CEMS.

[County Rule 210 §302.1c(2) and (3)] [locally enforceable only] [40 CFR 60.8]

- 2) **40 CFR SUBPART Da COMPLIANCE TESTING FOR DUCT BURNERS:**
Permittee satisfied the initial testing requirements of 40 CFR 60, Subparts A and Da following issuance of the previous permit. If the Control Officer requires additional testing under 40 CFR 60 Subparts A and Da, the applicable procedures described in §60.50Da shall be followed.

[40 CFR §60.50Da]

- 3) **SUBPART GG COMPLIANCE TESTING FOR COMBUSTION TURBINES:**
Permittee satisfied the initial testing requirements of 40 CFR 60 Subparts A and GG following issuance of the previous permit. If the Control Officer requires additional testing under 40 CFR 60 Subparts A and GG, the applicable procedures described in §60.335(a) and (b) with the alternatives provided in §60.335(c) shall be followed.

[40 CFR §60.335]

Table 22.1 Stack Emissions Test Requirements

| Device to be Tested and Operating Conditions | Pollutant | Method ¹ | Frequency |
|--|---------------------------------|---|---|
| Each Combined Cycle System | NOx | See permit condition 20.C | See permit condition 20.C |
| Each Combined Cycle System | CO | See permit condition 20.D | See permit condition 20.D |
| Each Combined Cycle System when operating either at full load available on the day of testing ^{5,6} or at an alternative load level established and approved as part of the pretest protocol ^{2,3} | PM ₁₀ ^{3,4} | Method 201A and 202 | Between 11 and 13 months from the date of the last PM10 test. |
| Each Combined Cycle System when operating either at full load available on the day of testing ^{5,6} or at an alternative load level established and approved as part of the pretest protocol ² | VOC ⁷ | Method 25a and 18 | Between 11 and 13 months from the date of the last VOC test. |
| Each Combined Cycle System when operating either at full load available on the day of testing ^{5,6} or at an alternative load level established and approved as part of the pretest protocol ² | Ammonia | EPA Conditional Test Method CTM-027 | At time of next PM10 test. Subsequent 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. |
| Each Combined Cycle System when operating at full load available on the day of testing ^{5,6} | Formaldehyde | CTM-037 "Method for Measurement of Formaldehyde Emissions From Natural Gas-Fired Stationary Sources - Acetyl Acetone Derivitization Method" | Within 180 days after permit issuance. |

| | | | |
|---|--------|-------------------------|--|
| Each Combined Cycle System when operating at full load available on the day of testing ^{5,6} | Hexane | Compendium Method TO-15 | Within 180 days after permit issuance. |
|---|--------|-------------------------|--|

[County Rule 210 §302.1c(2) and (3)] [locally enforceable only]

[40 CFR 60.8] [40 CFR 60.50Da; 60.50Da(f)] [40 CFR 60.335(a) and (b)]

- 1) “Method” refers to 40 CFR Part 60 Appendix A emissions testing methods.
- 2) Nameplate capacities are specified in Appendix A of this permit.
- 3) For PM10 testing (filterable and condensable), EPA test Method 5 may be substituted for EPA Test method 201A, if the Permittee agrees to assume that all particulates are PM10.

[County Rule 270] [County Rule 210 §302]

- 4) The sampling time and sample volume for each PM10 test run shall be at least 120 minutes and 1.70 dscm (60 dscf).

[40 CFR §60.48a(b)] [County Rule 210 §302]

- 5) Full load available on the day of testing includes operation of the combined cycle system with duct burners operating and any other means of increasing generator output (evaporative coolers, chillers, etc.) unless atmospheric conditions preclude their use.

[County Rule 270] [County Rule 210 §302]

- 6) During each performance test, the Permittee shall record the combined cycle system generator output, fuel flow rate, SCR inlet temperature and ammonia injection rate. These and any additional operational parameters shall be identified in the test protocol and recorded during testing.

[County Rule 270] [County Rule 210 §302]

- 7) During each VOC performance test for each combined cycle system, Permittee shall record and report with the final test report, the CO emission data collected by the CO CEMS during the VOC performance test.

[40 CFR §64.4(c)]

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

B. Testing Criteria: Performance tests shall be conducted and data reduced in accordance with the test methods and procedures specified unless the Control Officer and Administrator specifies or approves minor changes in methodology to a reference method, approves the use of an equivalent test method, approves the use of an alternative method that has been determined to be acceptable for demonstrating compliance, or waives 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)]

C. 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]

- D. **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 (refer to Table 22.1).

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

- E. **Monitoring Requirements:** The Permittee shall record all process and control equipment information that are 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.

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

- F. **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. The test protocol shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. 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][40 CFR §60.8(d)]

- G. **Notice of Testing:** The Permittee shall notify the Department in writing at least two weeks in advance of the actual date and time of each performance test so that the Department may have a representative attend.

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

- H. 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)]
- I. 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. 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.
[County Rule 270 §406][40 CFR §60.8(f)]
- J. Test Report Submittal: The Permittee shall complete and submit a separate test report for each performance test to the Department within 30 days after the completion of testing. The test report shall be prepared in accordance with the Department's "Air Quality Performance Test Guidelines for Compliance Determination in Maricopa County" dated June 17, 2005. 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]
- K. 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 applicable.
[County Rule 270 §407]
- L. 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]

23. OTHER:

A. 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 extends to the non-applicable requirements identified in Appendix C of this permit. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §§405.7 and 407]

B. ACID RAIN PERMIT:

- 1) The Acid Rain Phase II Permit Application and Certificate of Representation signed by the Designated Representative on March 9, 2006, and submitted to the Control Officer, shall constitute the Permittee's Acid Rain Permit.
- 2) The Permittee shall comply with the Acid Rain Permit, 40 CFR Parts 72, 73, 75, and 77 and the Acid Rain requirements of Permit Condition 6.
- 3) 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.
- 4) The Permittee shall hold SO₂ Allowances as of the allowance transfer deadline in each Combined Cycle System compliance subaccount not less than the total annual actual emissions of SO₂ for the previous calendar year from each combined Cycle System as required by the Acid Rain Program.
- 5) The SO₂ Allowance Allocations and NO_x Requirements for each Combined Cycle System are as follows:

| Affected Unit | Pollutant | Years 2000 - 2009 | Years 2010 and beyond |
|----------------------|------------------|--|------------------------------|
| 1, 2, 5, and 6 | SO ₂ | NA | NA |
| 1, 2, 5, and 6 | NO _x | This unit is not subject to a NO _x limit under 40 CFR Part 76 | |
| | | | |
| | | | |

NA means no allocations are available since these are new units.

[40 CFR 72, 73, and 75]

**24. PERMIT CONDITIONS FOR SPRAY COATING OPERATIONS AS SUPPORT
ACTIVITIES FOR THIS FACILITY**

A. OPERATIONAL LIMITATIONS AND STANDARDS:

1) The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

a) The Permittee shall operate all spray coating equipment inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object(s) being coated.

(1) For three-sided enclosures, the Permittee shall direct the spray in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.

(2) For enclosures with three sides and a roof, or for complete enclosures, the Permittee shall direct the spray into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of any open top of the enclosure.

[County Rule 315 §301.1] [locally enforceable only]

b) The Permittee shall install and operate a filtering system on any spray booth or enclosure with forced air exhaust.

(1) The filtering system shall have an average overspray removal efficiency of at least 92% by weight for the type of material being sprayed as certified in writing by the manufacturer.

(2) No gaps, sags or holes shall be present in the filters and all exhaust must be discharged into the atmosphere.

[County Rule 315 §301.2] [locally enforceable only]

2) The Permittee shall be exempt from Condition 25.A.1 above if the spray coating operation is one of the following:

a) Spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating;

b) Spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating;

c) Spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'W x 25'L x 8'H;

d) Enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air; or

e) Coating operations utilizing only hand-held aerosol cans.

[County Rule 315 §302] [locally enforceable only]

B. MONITORING REQUIREMENTS

1) The Permittee shall inspect each filter installed on a spray booth or enclosure for gaps, sags, or holes once per week.

a) Should the Permittee observe any gaps, sags, or holes in any of the filters, the Permittee shall immediately repair or replace the filter and record the name of the inspector, the

location of filtering system containing the filter (if more than one spray booth), and the time and date that the filter was replaced.

- b) If no gaps, sags, or holes are observed in any of the filters, the Permittee shall record the name of the inspector, the location of the filtering system containing the filter (if more than one spray booth), and the time and date that the filter was inspected.
- 2) The Permittee shall inspect the facility for evidence of any spraying activity that occurred outside of the spray booth once per week.

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

C. RECORDKEEPING REQUIREMENTS

The Permittee shall maintain on file and make available to the Control Officer upon request a copy of the manufacturer's specifications verifying that the average overspray removal efficiency for the filter is at least 92%.

[County Rule 210 §302.1d] [locally enforceable only]

D. REPORTING CONDITIONS

For the purposes of the semi-annual compliance certification, the Permittee shall provide the following information:

- 1) If the Permittee operates all spray coating equipment inside an enclosure without fixed air exhaust, the Permittee shall provide a statement certifying the following:
 - a) That the enclosure has at least three sides that are a minimum of eight feet in height;
 - b) That no spraying was conducted within three feet of any open end, or within two feet of any open top of the enclosure; and
 - c) That the spray is directed in a horizontal or downward pointing manner for three-sided enclosures, or away from any opening for complete enclosures and three-sided enclosures with roofs.
- 2) If the Permittee operates all spray coating equipment with a filtering system on a spray booth or enclosure with forced air exhaust, the Permittee shall provide a statement certifying the following:
 - a) Whether each filter installed on a spray booth or enclosure was inspected for gaps, sags, or holes once every two weeks;
 - b) Whether all filters that were observed to have gaps, sags, or holes were immediately replaced; and
 - c) Details of the make and manufacturer of each filter used as well as the overspray control efficiency.
- 3) The Permittee shall provide a statement certifying that no spraying occurred outside of the paint booths. If evidence of spraying outside of the booth was found, the Permittee shall instead submit a statement detailing any corrective action taken in order to ensure that future spraying occurs inside the spray booth.

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

25. PERMIT CONDITIONS FOR ARCHITECTURAL COATINGS:

A. OPERATIONAL LIMITATIONS:

- 1) The Permittee shall not apply any architectural coating manufactured after July 13, 1988, which is recommended for use as a bituminous pavement sealer unless it is an emulsion type coating.
[County Rule 335 §301] [SIP Rule 335 §301]
- 2) The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 grams/liter [g/l]) of VOCs per gallon (gal) of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings.
[County Rule 335 §303] [SIP Rule 335 §301]
- 3) The Permittee shall not apply any flat architectural coating manufactured after July 13, 1989, which contains more than 2.1 lbs (250 grams/liter [g/l]) of VOCs per gallon (gal) of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings.
[County Rule 335 §304] [SIP Rule 335 §301]
- 4) The Permittee shall not apply any architectural coating that exceeds the following limits. Limits are expressed in pounds of VOC per gal of coating as applied, excluding water and any colorant added to tint bases.

SPECIALTY COATINGS:

| <u>COATING</u> | (lb/gal) |
|---|----------|
| Concrete Curing Compounds- | 2.9 |
| Dry Fog Coating | |
| Flat | 3.5 |
| Non-flat | 3.3 |
| Enamel Undercoaters | 2.9 |
| General Primers, Sealers and Undercoaters | 2.9 |
| Industrial Maintenance Primers and Topcoats | |
| Alkyds | 3.5 |
| Catalyzed Epoxy | 3.5 |
| Bituminous Coating Materials | 3.5 |
| Inorganic Polymers | 3.5 |
| Vinyl Chloride Polymers | 3.5 |
| Chlorinated Rubbers | 3.5 |
| Acrylic Polymers | 3.5 |
| Urethane Polymer | 3.5 |
| Silicones | 3.5 |
| Unique Vehicles | 3.5 |
| Lacquers | 5.7 |
| Opaque Stains | 2.9 |
| Wood Preservatives | 2.9 |
| Quick Dry Enamels | 3.3 |
| Roof Coatings | 2.5 |
| Semi-transparent Stains | 2.9 |
| Semi-transparent and Clear Wood Preservatives | 2.9 |
| Opaque Wood Preservatives | 2.9 |

SPECIALTY COATINGS (continued):

| <u>COATING</u> | (lb/gal) |
|---|----------|
| Specialty Flat Products | 3.3 |
| Specialty Primers, Sealers and Undercoaters | 2.9 |
| Stains, All | 2.9 |
| Traffic Coatings | |
| Applied to Public Streets and Highways | 2.1 |
| Applied to other Surfaces | 2.1 |
| Black Traffic Coatings | 2.1 |
| Varnishes | 2.9 |
| Waterproof Mastic Coating | 2.5 |
| Waterproof Sealers | 3.3 |
| Wood Preservatives Except Below Ground | 2.9 |

[County Rule 335 §305] [SIP Rule 335 §305]

- 5) The following coatings are exempt from the architectural coatings requirements specified in the permit conditions above:
- a) Architectural coatings supplied in containers having capacities of one quart or less.
 - b) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - i) Below ground wood preservative coatings.
 - ii) Bond breakers.
 - iii) Fire retardant coatings.
 - iv) Graphic arts coatings (sign paints)
 - v) Mastic texture coatings.
 - vi) Metallic pigmented coatings.
 - vii) Multi-colored paints.
 - viii) Quick-dry primers, sealers and undercoaters.
 - ix) Shellacs.
 - x) Swimming pool paints.
 - xi) Tile-like glaze coatings.

[County Rule 335 §§306 and 307] [SIP Rule 335 §§306 and 307]

B. RECORDKEEPING/MONITORING:

- 1) The Permittee shall keep the material list of all coatings used. The material list shall contain the name of each coating, short description of the material, lbs of VOCs per gal of coating, excluding water and colorant added to tint bases and amount used. If the coating is exempt from the VOC content requirements, the justification for the determination shall be documented and kept on file.

[County Rule 210 §302.1.c(2)]
- 2) Containers for all coatings subject to Rule 335 shall carry a statement of the manufacturer's recommendation regarding thinning of the coatings, except for thinning with water. In addition, containers shall be labeled with the date of manufacture (or a code indicating the date of manufacture). Permittee shall maintain manufacturer labels on all materials subject to the architectural coating section of this permit and County Rule 335. In addition,

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Permittee shall follow recommendations for diluting or thinning provided by the manufacturer on such labels.

[County Rule 335 §401] [SIP Rule 335 §401 and 402]

C. **REPORTING:**

The semiannual compliance and monitoring report required by this permit (under the reporting section) shall include a copy of the material list required by the previous permit condition. The report shall also include a list of any deviations from this permit condition.

[County Rule 210 §302.1d]

D. **TESTING:**

If required by the Control Officer testing procedures to determine compliance with prescribed VOC limits shall be consistent with Reference Methods 24 and 24A in the Arizona Testing Manual for Air Pollutant Emissions.

[County Rule 335 §500] [SIP Rule 335 §500]

26. DUST GENERATING ACTIVITIES

A. DUST CONTROL PLAN REQUIRED

- 1) The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operation. The Dust Control Plan shall describe all control measures to be implemented before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. The Plan shall include at least all the information contained in County Rule 310 §304. At least one primary control measure and one contingency control measure must be identified from Tables 1-19 of County Rule 310, included at the end of this permit condition.

[County Rule 310 §§303.1, 303.2, 303.3 and 303.4]

[SIP Rule 310 §§303.1, 303.2, 303.3 and 303.4]

- 2) Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of County Rule 310, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §§303.2 and 306] [SIP Rule 310 §§303 and 306]

- 3) If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from this permit condition, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305] [SIP Rule 310 §305]

- 4) If any changes to a Dust Control Plan, associated with this Permit, are necessary as a result of the most recent revisions of County Rule 310, then the Permittee shall submit a revised Dust Control Plan to the Control Officer, according to the minor permit revision procedures describe in County Rule 210, no later than 6 months after the effective date of the most recent revisions to County Rule 310.

[County Rule 310 §402.2] [SIP Rule 310 §402.2]

B. ALLOWABLE EMISSIONS

- 1) The Permittee shall not allow visible fugitive dust emissions to exceed 20% opacity. Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:
 - a) All control measures required were followed and one or more of the control measures in Tables 20 & 21 of this permit condition were applied and maintained;
 - b) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
 - c) The Permittee compiled and retained records, in accordance with the recordkeeping requirements of this permit; and

- d) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301.1, Tables 20 & 21][SIP Rule 310 §301.1 and Table 2]

- 2) No opacity limitation shall apply to emergency maintenance of flood control channels and water retention basins, provided that control measures are implemented.

[County Rule 310 §301.2][locally enforceable only][SIP Rule 30]

C. OPERATIONAL REQUIREMENTS FOR FUGITIVE DUST SOURCES

1) Stabilization Requirements

- a) The Permittee shall not allow visible fugitive dust emissions from unpaved parking lots to exceed 20% opacity and either;

1) shall not allow silt loading equal to or greater than 0.33 oz/ft²;

2) shall not allow the silt content to exceed 8%.

[County Rule 310 §302.1][SIP Rule 310 §302.1]

- b) The Permittee shall not allow visible fugitive dust emissions from unpaved Haul/Access roads to exceed 20% opacity and either,

1) shall not allow silt loading equal to or greater than 0.33 oz/ft²;

2) shall not allow the silt content to exceed 6%.

[County Rule 310 §302.2a][SIP Rule 310 §302.2a]

- c) The Permittee shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road, limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with subsection 302.2(b) of County Rule 310, the Permittee must include, in the Dust Control Plan, the maximum number of vehicle trips on the unpaved haul/access roads each day (i.e. number of employee vehicles, earthmoving equipment, haul trucks and water trucks)

[County Rule 310 §302.2b][SIP Rule 310 §302.2b]

- d) The Permittee shall meet at least one of the standards below, as applicable, for any open areas and vacant lots or any disturbed surface areas on which no activity is occurring. Should a disturbed open area and/or vacant lot or any disturbed surface area on which no activity is occurring contain more than one type of disturbance, soil, vegetation, or other characteristics, which are visibly distinguishable, the Permittee shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, according to the appropriate test methods in Appendix C of the Maricopa County rules, and include or eliminate it from the total size assessment of disturbed surface area(s) depending upon test method results. The Permittee shall be considered in violation of Maricopa County Rule 310 if such inactive disturbed area is not maintained in a manner that meets at least one of the standards listed below, as applicable.

1) Maintain a visible crust;

2) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;

- 3) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
 - 4) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal or greater than 30%;
 - 5) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;
 - 6) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements;
 - 7) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator of the Environmental Protection Agency (EPA).
[County Rule 310 §302.3][SIP Rule 310 §302.3]
- 2) Control Measures: The Permittee shall implement control measures before, after and while conducting any dust generating operation, including during weekends, after work hours, and on holidays, in accordance with Section 304.3 and Tables 1-21 (incorporated at the end of this Permit Condition) of County Rule 310 For the purpose of these Permit Conditions, any control measure that is implemented must meet the applicable standard(s) described in County Rule 310 §§301 and 302, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in County Rule 310. Failure to comply with the provision of County Rule 310 §308 (Work Practices), as applicable, and/or of an approved Dust Control Plan, is deemed a violation of this Permit.
[County Rule 310 §306][SIP Rule 310 §306]
- 3) Should any primary control measures(s) in an approved Dust Control Plan prove ineffective, the Permittee shall immediately implement the contingency control measure. If the identified contingency control measure(s) is effective to comply with all of the requirements of County Rule 310 and this Permit, the Permittee need not revise the Dust Control Plan under Section 305 of County Rule 310 and this permit condition, which may obviate the requirement of submitting a revised Dust Control Plan.
[County Rule 310 §303.3][SIP Rule 310 §303.2]
- 4) Work Practices: The Permittee shall comply with the following work practices in addition to implementing, as applicable, the control measures described in Table 1-21 in County Rule 310 included at the end of this permit condition:
- a) Bulk Material Hauling **Off-Site** onto Paved Areas Accessible to the Public: Notwithstanding other sections of County Rule 310 and this Permit, the Permittee shall do all of the following:
 - 1) Load all haul trucks such that the freeboard is not less than three inches;
 - 2) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/pr tailgate(s);

- 3) Cover all haul trucks with a tarp or other suitable closure; and
 - 4) Before the empty haul truck leaves the site, clean the interior of the cargo compartment or cover the cargo compartment.
- b) Bulk Material Hauling **On-Site** Within the Boundaries of the Work Site: When crossing a paved area accessible to the public while construction is underway, the Permittee shall do all of the following:
- 1) Load all haul trucks such that the freeboard is not less than three inches; and
 - 2) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
 - 3) Install a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site. Examples of trackout control devices are described in Table 17 at the end of this permit condition.
- c) Unpaved Haul/Access Roads: The Permittee shall implement one or more control measure(s) described in Table 3 shown at the end of this permit condition (Unpaved Haul/Access Roads) before maintaining unpaved haul/access roads.
- d) Open Storage Piles:
For the purpose of this permit, an open storage pile is any accumulation of bulk material with a 5% or greater silt content which in any one point attains a height of three feet and covers a total surface area of 150 square feet or more. Silt content shall be assumed to be 5% or greater unless a person can show, by testing in accordance with ASTM Method C136-96A or other equivalent method approved in writing by the Control Officer and the Administrator of EPA, that the silt content is less than 5%.
- 1) Prior to and/or while conducting stacking, loading, and unloading operations, comply with one of the following work practices:
 - a) Spray material with water, as necessary; or
 - b) Spray material with a dust suppressant other than water, as necessary.
 - 2) When not conducting stacking, loading, And unloading Operations, comply with one of the following work practices:
 - a) Cover open storage piles with tarps, plastic, or other material to prevent wind from removing the coverings; or
 - b) Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98, or other equivalent methods approved by the Control Officer and the Administrator of EPA. For areas which have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91(1998) or other equivalent approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or
 - c) Meet one of the stabilization requirements described in Section 302.3 of County Rule 310 ; or

- d) Construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%. If implementing this subsection, must also implement subsection (b) or (c) above.
[County Rule 310 §308 and Table 1] [SIP Rule 310 §308]
[SIP Rule 31]
- e) Spillage, Carry-Out, Erosion, and/or Trackout: The Permittee shall do all of the following:
 - 1) Install, maintain, and use a suitable trackout control device (examples of trackout control devices are described in Table 17 shown at the end of this permit condition) that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site at all exits onto paved areas accessible to the public from both of the following
 - a) All work sites with a disturbed surface area of two acres or larger; and.
 - b) All work sites where 100 cubic yards of bulk materials are hauled on-site and/or off-site per day.
 - 2) Cleanup spillage, carry-out, erosion, and/or trackout on the following time-schedule:
 - a) Immediately, when spillage, carry-out, and/or trackout extends a cumulative distance of 50 linear feet or more; or
 - b) At the end of the workday, for all other spillage, carry-out, erosion, and/or trackout
- f) Soil Moisture: If water is the chosen control measure in an approved Dust Control Plan, the Permittee shall operate a water application system on-site (e.g., water truck, water hose) while conducting any earthmoving operations on disturbed surface areas 1 acre or larger, unless a visible crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.
- g) Easements, Rights-of-Way, and Access Roads for Utilities (Electricity, Natural Gas, Oil, Water and Gas Transmission) Associated with Sources that have a Non-Title V Permit, a Title V Permit, and/or a General Permit under the County Rules: The Permittee shall do at least one of the following:
 - 1) Restrict vehicular trips to no more than 20 per day per road; or
 - 2) Implement control measures as described in Table 3 shown at the end of this permit condition (Unpaved Haul/Access Roads).
- h) Weed Abatement by Discing or Blading: The Permittee shall comply with all of the following weed abatement procedures by discing or blading:
 - 1) Apply water before weed abatement by discing or blading occurs; and
 - 2) Apply water while weed abatement by discing or blading is occurring; and
 - 3) Either:

- a) Pave, apply gravel, apply water, or apply a suitable dust suppressant, in compliance with Section 302.3 of County Rule 310 or Section 26.C.1.d of this permit.
- b) Establish vegetative ground cover in sufficient quantity, in compliance with Section 302.3 or County Rule 310 or Section 26.C.1.d of this permit, after weed abatement by discing or blading occurs.

D. MONITORING AND RECORDKEEPING FOR DUST GENERATING ACTIVITIES

- 1) The Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan (including records on any street sweeping, water applications, and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps). Upon verbal or written request by the Control Officer, the log or the records and supporting documentation shall be provided within 48 hours, excluding weekends. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310 §502] [SIP Rule 310 §502]
- 2) Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310 §503] [SIP Rule 310 §503]
- 3) The following test methods shall be followed :
 - a) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with Appendix C, Section 3 of the Maricopa County Rules (Time Averaged Methods of Visual Opacity Determination of Emissions from Dust Generating Operations) except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.
 - b) Unpaved parking lot: Opacity Observations of any unpaved parking lot shall be conducted in accordance with Appendix C, Section 2.1 of the Maricopa County Rules (Test Methods for Stabilization for Unpaved Roads and Unpaved Parking Lots).
 - c) Unpaved Haul/Access Road: Opacity observations of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 of the Maricopa County Rules (Test methods for Stabilization-for unpaved Roads and Unpaved Parking Lots).

[County Rule 310 §501.1, Appendix C]
[SIP Rule 310 §501.1, Appendix C]
 - d) Unpaved parking lot: Stabilization observations for unpaved parking lots shall be conducted in accordance with Appendix C, Section 2.1 (Test Methods for Stabilization-For Unpaved Roads and Unpaved Parking Lots) of the Maricopa County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits established in County Rule 310 determined by any of the applicable test methods constitutes a violation of County Rule 310.

- e) Unpaved Haul/Access Road: Stabilization observations for unpaved haul/access roads (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with Appendix C, Section 2.1 (Test methods for Stabilization-for Unpaved Roads and Unpaved Parking Lots) of the County Rules. When more than 1 test method is permitted for a determination, an exceedance of the limits, established in Rule 310, determined by any of the applicable test methods constitutes a violation of County Rule 310.
- f) Open Area and Vacant Lot or Disturbed Surface Area: Stabilization observations for an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall be conducted in accordance with at least one of the techniques described in County Rule 310 §501.2.c.(1) through (7), as applicable. The Permittee shall be considered in violation of County Rule 310 if such inactive disturbed surface area is not maintained in a manner that meets at least 1 of the standards described in subsection 302.3 of County Rule 210, as applicable.

[County Rule 310 §501.2, Appendix C]
[SIP Rule 310 §501.2, Appendix C]

TABLES OF FUGITIVE DUST CONTROL MEASURES

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| <p style="text-align: center;">Table 1 Vehicle Use In Open Areas And Vacant Lots</p> <p>a. An owner and/or operator must implement one of the following control measures:</p> <ol style="list-style-type: none">1. Restrict trespass by installing signs; or2. Install physical barriers such as curbs, fences, gates, posts, signs, shrubs, and/or trees to prevent access to the area. |
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|---|
| <p style="text-align: center;">Table 2 Unpaved Parking Lots</p> <p>a. An owner and/or operator must implement one of the following control measures:</p> <ol style="list-style-type: none">1. Pave;2. Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with Section 302.1 of County Rule 310; or3. Apply a suitable dust suppressant in compliance with Section 302.1 of County Rule 310. <p>b. Suggested additional control measure for contingency plans:</p> <ol style="list-style-type: none">1. Limit vehicle speeds to 15 m.p.h. on the site. |
|---|

| |
|--|
| <p style="text-align: center;">Table 3 Unpaved Haul/Access Roads</p> <p>a. An owner and/or operator must implement one of the following control measures:</p> <ol style="list-style-type: none">1. Limit vehicle speed to 15 m.p.h or less and limit vehicular trips to no more than 20 day;2. Apply water, so that the surface is visibly moist in compliance with Section 302.2 of County Rule 310;3. Pave;4. Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with Section 302.2 of County Rule 310; or5. Apply a suitable dust suppressant, in compliance with Section 302.2 of County Rule 310. |
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| <p style="text-align: center;">Table 4 Open Areas And Vacant Lots</p> <p>a. An owner and/or operator must implement one of the following control measures to comply with Section 302.3 of County Rule 310:</p> <ol style="list-style-type: none">1. Pave, apply gravel, or apply a suitable dust suppressant;2. Establish vegetative ground cover in sufficient quantity; or3. Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions. |
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| <p style="text-align: center;">Table 5 Disturbed Surface Areas – Pre-Activity Work Practices</p> |
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- a. Before activity begins, an owner and/or operator must implement one of the following control measures:
 - 1. Pre-water site to depth of cuts, allowing time for penetration; or
 - 2. Phase work to reduce the amount of disturbed surface areas at any one time.

Table 6
Disturbed Surface Areas – Work Practices During Operations

- a. During operations, an owner and/or operator must implement one of the following control measures:
 - 1. Apply water or other suitable dust suppressant, in compliance with Section 301 of County Rule 310;
 - 2. Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98 or other equivalent method as approved by the Control Officer and the Administrator of EPA. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91 (1998) or other equivalent method approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or
 - 3. Implement (a)(1) or (a)(2) above and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of windblown material leaving a site.
- b. Suggested additional control measure for contingency plans:
 - 1. Limit vehicle speeds to 15 m.p.h on the work site.

Table 7
Disturbed Surface Areas – Temporary Stabilization (Up To 8 Months)
During Weekends, After Work Hours, And On Holidays

- a. An owner and/or operator must implement one of the following control measures to comply with Section 302.3 of County Rule 310:
 - 1. Pave, apply gravel, or apply a suitable dust suppressant;
 - 2. Establish vegetative ground cover in sufficient quantity; or
 - 3. Implement (a)(1) or (a)(2), above, and restrict vehicular access to the area.

Table 8
Disturbed Surface Areas – Permanent Stabilization
(Required Within 8 Months Of Ceasing Dust Generating Operations)

- a. An owner and/or operator must implement one of the following control measures to comply with Section 302.3 of County Rule 310:
 - 1. Pave, apply gravel, or apply a suitable dust suppressant;
 - 2. Establish vegetative ground cover in sufficient quantity; or
 - 3. Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.

Table 9
Blasting Operations

- a. An owner and/or operator must implement all of the following control measures:
 - 1. In wind gusts above 25 m.p.h., discontinue blasting; and
 - 2. Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.

Table 10
Demolition Activities

- a. An owner and/or operator must implement all of the following control measures:
 - 1. Stabilize demolition debris. Apply water to debris immediately following demolition activity; and
 - 2. Stabilize surrounding area immediately following demolition activity. Water all disturbed soil surfaces to establish a crust and prevent wind erosion of soil.
- b. Suggested additional control measure for contingency plans:
 - 1. Thoroughly clean blast debris from paved and other surfaces following demolition activity.

Table 11
Bulk Material Handling Operations
Work Practices For Stacking, Loading, And Unloading Operations

- a. An owner and/or operator must implement one of the following control measures:
 - 1. Spray material with water, as necessary, prior to stacking, loading, and unloading, and/or while stacking, loading, and unloading;
 - 2. Spray material with a dust suppressant other than water, as necessary, prior to stacking, loading, and unloading, and/or while stacking, loading, and unloading.
- b. Suggested additional control measures for contingency plans:
 - 1. Pre-water and maintain surface soils in a stabilized condition where support equipment and vehicles will operate.
 - 2. Remove material from the downwind side of the storage pile when safe to do so.
 - 3. Empty loader bucket slowly and keep loader bucket close to the truck to minimize the drop height while dumping.

Table 12
Open Storage Piles
When Not Conducting Stacking, Loading, And Unloading Operations

- a. An owner and/or operator must implement one of the following control measures:
 - 1. Cover open storage piles with tarps, plastic, or other material such that the coverings will not be dislodged by wind;
 - 2. Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98, or other equivalent methods approved by the Control Officer and the Administrator of the EPA; or for areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91 (1998) or other equivalent methods approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the soil moisture content;
 - 3. Meet the stabilization requirements described in Section 302.3 of County Rule 310; or
 - 4. Implement (a)(2) or (a)(3), above, and construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

Table 13
Bulk Material Hauling/Transporting Within The Boundaries Of The Work Site

**When Crossing A Paved Area Accessible To The Public
While Construction Is Underway**

- a. An owner and/or operator must implement all of the following control measures:
 - 1. Load all haul trucks such that the freeboard is not less than 3 inches when crossing a paved area accessible to the public while construction is underway;
 - 2. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s);
 - 3. Install a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse such work site.
- b. Suggested additional control measure for contingency plans:
 - 1. Limit vehicle speeds to 15 m.p.h. on the work site.

**Table 14
Bulk Material Hauling/Transporting When On-Site Hauling/Transporting
Within The Boundaries Of The Work Site But Not Crossing
A Paved Area Accessible To The Public**

- a. An owner and/or operator must implement one of the following control measures:
 - 1. Limit vehicular speeds to 15 m.p.h. or less while traveling on the work site;
 - 2. Apply water to the top of the load in compliance with Section 301 of County Rule 310; or
 - 3. Cover haul trucks with a tarp or other suitable closure.

**Table 15
Bulk Material Hauling/Transporting Off-Site Hauling/Transporting
Onto Paved Areas Accessible To The Public**

- a. An owner and/or operator must implement all of the following control measures:
 - 1. Cover haul trucks with a tarp or other suitable closure;
 - 2. Load all haul trucks such that the freeboard is not less than 3 inches;
 - 3. Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s); and
 - 4. Before the empty haul truck leaves the site, clean the interior of the cargo compartment or cover the cargo compartment.

Table 16
Clean Up Of Trackout, Carry Out, Spillage, And Erosion

- a.** An owner and/or operator must implement one of the following control measures:
 - 1.** Operate a street sweeper or wet broom with sufficient water, at the speed recommended by the manufacturer and at the frequency(ies) described in Section 308.3 of County Rule 310; or
 - 2.** Manually sweep up deposits in compliance with Section 308.3 of County Rule 310.

Table 17
Trackout Control

- a.** An owner and/or operator must implement all of the following control measures:
 - 1.** Immediately clean up trackout that exceeds 50 feet. All other trackout must be cleaned up at the end of the workday; and
 - 2.** In accordance with Section 308.3(a), prevent trackout by implementing one of the following control measures:
 - i.** At all access points, install a grizzly or wheel wash system.
 - ii.** At all access points, install a gravel pad at least 30 feet wide, 50 feet long, and 6 inches deep, in compliance with Section 213 of County Rule 310.
 - iii.** Pave starting from the point of intersection with a paved area accessible to the public and extending for a centerline distance of at least 100 feet and a width of at least 20 feet.
- b.** Suggested additional control measures for contingency plans:
 - 1.** Clearly establish and enforce traffic patterns to route traffic over selected trackout control devices.
 - 2.** Limit site accessibility to routes with trackout control devices in place by installing effective barriers on unprotected routes.
 - 3.** Pave construction activity roadways as soon as possible.

Table 18
Weed Abatement By Discing Or Blading

- a.** An owner and/or operator must implement all of the following control measures:
 - 1.** Pre-water site;
 - 2.** Apply water while weed abatement by discing or blading is occurring; and
 - 3.** Stabilize area by implementing either one of the following:
 - i.** Pave, apply gravel, apply water, or apply a suitable dust suppressant, in compliance with Section 302.3 of County Rule 310, after weed abatement by discing or blading occurs; or
 - ii.** Establish vegetative ground cover in sufficient quantity, in compliance with Section 302.3 of County Rule 310, after weed abatement by discing or blading occurs.
- b.** Suggested additional control measures for contingency plans
 - 1.** Limit vehicle speeds to 15 m.p.h. during discing and blading operations.

Table 19

Easements, Rights-Of-Way, And Access Roads For Utilities (Electricity, Natural Gas, Oil, Water, And Gas Transmission) Associated With Sources That Have A Non-Title V Permit, A Title V Permit, And/Or A General Permit Under These Rules

- a. An owner and/or operator must implement one of the following control measures:
 - 1. Inside the PM10 nonattainment area, restrict vehicular speeds to 15 m.p.h. and vehicular trips to no more than 20 per day per road;
 - 2. Outside the PM10 nonattainment area, restrict vehicular trips to no more than 20 per day per road; or
 - 3. Implement control measures, as described in Table 3 (Unpaved Haul/Access Roads) of County Rule 310.

Note: For Tables 20 & 21, control measures in [brackets] are to be applied only to dust generating operations outside the nonattainment area.

Table 20

Wind Event Control Measures-Dust Generating Operations

- a. An owner and/or operator must implement one of the following control measures:
 - 1. Cease dust generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 m.p.h. and if dust generating operations are ceased for the remainder of the work day, stabilize the area;
 - 2. Apply water or other suitable dust suppressant at least twice [once] per hour, in compliance with Section 301 of County Rule 310;
 - 3. Apply water as necessary to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-98 or other equivalent method as approved by the Control Officer and the Administrator of EPA. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-91 (1998) or other equivalent method approved by the Control Officer and the Administrator of EPA, maintain at least 70% of the optimum soil moisture content; or
 - 4. Implement (a)(2) or (a)(3), above, and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of wind-blown material leaving a site.

Table 21
Wind Event Control Measures-Temporary Disturbed Surface Areas
(After Work Hours, Weekends, Holidays)

- a.** An owner and/or operator must implement one of the following control measures:
 - 1.** Uniformly apply and maintain surface gravel or dust suppressants, in compliance with Section 302.3 of County Rule 310;
 - 2.** Apply water to all disturbed surface areas 3 times per day. If there is any evidence of wind-blown dust, increase watering frequency to a minimum of 4 times per day;
 - 3.** Apply water on open storage piles at least twice [once] per hour, in compliance with Section 302.3 of County Rule 310; or
 - 4.** Cover open storage piles with tarps, plastic, or other material such that wind will not remove the covering(s).
- b.** Suggested additional control measures for contingency plans:
 - 1.** Implement a combination of the control measures listed in (a)(1) through (a)(4), above.

27. ABRASIVE BLASTING

A. OPERATIONAL LIMITATIONS

1) Confined Blasting

All abrasive blasting operations shall be performed in a confined enclosure consisting of 3 or 4 sides and a roof or cover, unless one of the following conditions are met, in which case unconfined blasting may be performed if it is conducted in accordance with the unconfined blasting permit condition of these Permit Conditions.

- a) The item to be blasted exceeds 8 ft. in any one dimension, or
- b) The surface being blasted is fixed in a permanent location, cannot easily be moved into a confined enclosure, and the surface is not normally dismantled or moved prior to abrasive blasting.

The Permittee shall not use forced air exhaust in an abrasive blasting enclosure unless a certified blasting media is used.

[County Rule 312 §301&303] [locally enforceable only]

2) Unconfined Blasting

If the Permittee performs unconfined blasting, then at least one of the following control measures shall be used:

- a) Wet abrasive blasting,
- b) Vacuum blasting, or
- c) Dry abrasive blasting, provided that all of the following conditions are met:
 - (1) Perform only on a metal substrate.
 - (2) Use only certified abrasive for dry unconfined blasting.
 - (3) Blast only paint that is lead free (i.e. the lead content is less than 0.1percent).
 - (4) Perform the abrasive blasting operation directed away from unpaved surfaces.
 - (5) Use the certified abrasive not more than once unless contaminants are separated from the abrasive through filtration and the abrasive conforms to its original size.

[County Rule 312 §302] [SIP Rule 312]

3) Controls Required

Dry abrasive blasting in a confined enclosure with a forced air exhaust shall be conducted by implementing either of the following:

- a) Using a certified abrasive or
- b) Venting to an Emission Control System provided that all applicable requirements of Rule 312, Section 304 are followed (including operation and maintenance plan(s) and monitoring device(s)).

[County Rule 312 §303]

4) Opacity Limitation

The Permittee shall not discharge into the atmosphere from any abrasive blasting operation any air contaminant for an observation period or periods aggregating more than three minutes in any sixty minute period an opacity equal to or greater than 20 percent.

[County Rule 312 §305] [SIP Rule 312 §301]

An indicated excess will be considered to have occurred if any cumulative period of 15-second increments totaling more than three minutes within any sixty minute period was in excess of the opacity standard.

[County Rule 312 §305] [locally enforceable only]

5) Wind Event

The Permittee shall not conduct dry unconfined abrasive blasting during a wind event.

[County Rule 312 §306] [SIP Rule 312 §302.4]

6) Traffic Markers

Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting operations shall be performed by wet blasting, hydroblasting or vacuum blasting. Dry blasting may be performed using only certified abrasives when:

- a) Removing pavement markings of less than 1,000 square feet
- b) Performing surface preparation for raised traffic delineating markers of less than 1,000 square feet.

[County Rule 312 §307] [SIP Rule 312 §302.4]

7) Work Practices

a) Unconfined Blasting: The Permittee shall clean up spent abrasive material with a potential to be transported during a wind event and, until removal occurs, shall, at a minimum, meet the provisions of Rule 310 of these rules regarding work practices.

[County Rule 312 §308] [SIP Rule 312 §302.4]

b) Confined Blasting: At the end of the work shift the Permittee shall clean up spillage, carry-out, and/or trackout of any spent abrasive material with a potential to be transported during a wind event.

[County Rule 312 §308] [locally enforceable only]

B. MONITORING/RECORDKEEPING

At a minimum, the Permittee shall keep the following records onsite that are applicable to all abrasive blasting operations.

- 1) The date the blasting occurs,
- 2) The blasting equipment that is operating,
- 3) A description of the type of blasting.
- 4) The type and amount of solid abrasive material consumed on a monthly basis. Include name of certified abrasive used, as applicable.
- 5) Material Safety Data Sheets (MSDS) or results of any lead testing that was performed on paint that is to be removed via unconfined blasting, as applicable.

[County Rule 312 §501] [County Rule 210 §302.1c]

C. REPORTING

The Permittee shall include the following information in the semiannual monitoring/compliance report:

- 1) Whether abrasive blasting occurred during the reporting period,
- 2) Whether the blasting was confined or unconfined, and
- 3) If the blasting was unconfined, the control measure used to meet the requirements of these permit conditions.

[County Rule 210 § 302.1.e.(1)]

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D. COMPLIANCE DETERMINATION:

Compliance with the abrasive blasting requirements of this permit shall be determined according to County Rule 312, Section 503. Opacity from abrasive blasting shall be determined according to Rule 312, Section 505.

[County Rule 312 §503 and §505]

28. PERMIT CONDITIONS FOR COLD DEGREASING AND WIPE CLEANING:

A. OPERATIONAL LIMITATIONS/STANDARDS:

- 1) All cleaning machines shall be one of the following types:
 - a) Batch loaded cold cleaners with remote reservoir;
 - b) Batch loaded cold cleaners without a remote reservoir (such as solvent dip tank);
 - c) A system that is operated with only low VOC cleaners (A low VOC cleaner is any solution or homogeneous suspension that, as used, contains less than 50 grams of VOC per liter of material (0.42 lb VOC/gal) or is at least 95% water by weight or volume as determined by an applicable test method in Section 502 of County Rule 331); OR
 - d) A sealed system. A sealed system that is an airtight or airless cleaning system which is operated according to the manufacturer's specifications and, unless otherwise indicated by the manufacturer, meets all of the following requirements:
 - i) Has a door or other pressure-sealing apparatus that is shut during each cleaning and drying cycle.
 - ii) Has a differential pressure gauge that always indicates the pressure in the sealed chamber when occupied or in active use.
 - iii) Any associated pressure relief device(s) shall be so designed and operated as to prevent liquid cleaning-solvents from draining out.
 - e) This permit does not address the use of a VOC emission control system for solvent cleaning, or the use of a cleaning solvent that is heated, agitated, or non-conforming. Permittee, therefore, shall follow appropriate permit revision procedures in order to conduct cleaning with a heated, agitated, or non-conforming solvent or to conduct solvent cleaning that would require emission control equipment in order to meet the requirements of this permit and of County Rule 331.
 - f) Only the solvent handling requirements and monitoring and recordkeeping requirements of this permit condition apply to wipe cleaning operations.
 - g) Only the solvent handling, equipment, monitoring/recordkeeping, and reporting requirements of this permit condition apply to small cleaners (liquid surface area of 1 square foot or less, or maximum capacity of one gallon or less).

[County Rule 210 §302.1] [County Rule 331 §308.2a and §308.2.b]

B. SOLVENT HANDLING REQUIREMENTS:

- 1) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leakfree impervious containers that are opened only when adding or removing material.
 - a) Porous or absorbent materials used for wipe cleaning shall be stored in closed containers when not in use.
 - b) Each container shall be clearly labeled with its contents.
- 2) If any cleaning-solvent escapes from a container:
 - a) Wipe up or otherwise remove immediately if in accessible areas.
 - b) For areas where access is not feasible during normal production, remove as soon as reasonably possible.
- 3) Unless records show that VOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.

[County Rule 331 §301] [SIP Rule 331 §301]

C. EQUIPMENT REQUIREMENTS FOR ALL CLEANING MACHINES:

- 1) The Permittee shall provide a leakfree impervious container (degreaser) for the solvents and the articles being cleaned.
 - a) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.
 - b) No surface of any freeboard required by this permit shall have an opening or duct through which VOC can escape to the atmosphere except as required by OSHA.
[County Rule 331 §302.1] [SIP Rule 331 §302.1]
- 2) The Permittee shall maintain and operate all cleaning machine equipment required by this permit.

[County Rule 331 §302.2] [SIP Rule 331 §302.2]

D. SPECIFIC OPERATING AND SIGNAGE REQUIREMENTS FOR CLEANING MACHINES:

- 1) The Permittee shall conform to the following operating requirements when cleaning with cleaning-solvents other than Low-VOC Cleaners:
 - a) Comfort fans shall not be located or positioned in such a way as to direct airflow across the opening of any cleaning device.
 - b) Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine;
 - c) Drain cleaned parts for at least (15) fifteen seconds after cleaning or until dripping ceases, whichever is later;
 - d) If using a cleaning-solvent spray system:
 - (1) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
 - (2) Pressure at the orifice from which the solvent emerges shall not exceed (10) ten pounds per square inch, gauge (psig) and shall not cause liquid solvent to splash outside the solvent container.
 - (3) In an in-line cleaning machine, a shower-type spray is allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.
 - (4) Exceptions to the foregoing subsections (1), (2), and (3) are provided for in Special Non-vapor Cleaning Situations in the section titled the same below.
 - e) The Permittee shall not cause agitation of a cleaning-solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds (15) fifteen seconds;
 - f) The Permittee shall not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood, and rope. No object with a sealed wood handle, including a brush, is allowed;
 - g) The ventilation rate at the cleaning machine shall not exceed 65 cubic feet per minute per square foot of evaporative surface (20 cubic meters per minute per square meter), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional engineer experienced in ventilation, to meet health and safety requirements;
 - h) Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and 11 feet per minute (3.3 meters per minute);

- i) The Permittee shall prevent cross contamination of solvents regulated by Section 304 of Rule 331 with solvents that are not so regulated. Use signs, separated work-areas, or other effective means for this purpose. This includes those spray gun cleaning solvents that are regulated by another rule.
[County Rule 331 §303] [SIP Rule 331 §303]
 - 2) When using cleaning-solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank, the Permittee shall provide the following signage requirements on the machine, or within 3¼ feet (1 meter) of the machine, a permanent, conspicuous label, or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:
 - a) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)
 - b) "Drain parts until they can be removed without dripping."
 - c) "Do not blow off parts before they have stopped dripping."
 - d) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
 - e) "Don't leave cloth or any absorbent materials in or on this tank."
 - f) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post: "Operating instructions can be obtained from _____" listing a person or place where the instructions are available.
[County Rule 331 §303] [SIP Rule 331 §303]
- E. SOLVENT SPECIFICATIONS FOR NON-VAPOR CLEANING AND DEGREASING:
All cleaning solvents, except Low-VOC Cleaners, used in non-boiling cleaning machines shall comply with County Rule 331, Section 304.1 or 304.2 as follows:
- 1) Use a cleaning solvent having a total VOC vapor pressure at 68°F (20°C) not exceeding 1 millimeter of mercury column as determined by the standards described in Section 500 of County Rule 331.
 - 2) Use a sealed system that meets the requirements of County Rule 331, Section 304.3.
[County Rule 331 §304] [SIP Rule 331 §304]
- F. NON-VAPOR BATCH CLEANING MACHINES
- 1) The Permittee shall equip each batch cleaning machine with remote reservoir, including the cabinet type(s), with the following:
 - a) A sink-like work area or basin which is sloped sufficiently towards the drain so as to prevent pooling of cleaning-solvent.
 - b) A single, unimpeded drain opening or cluster of openings served by a single drain for the cleaning-solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5 square inches (100 square centimeters).
 - c) Provide a means for drainage of cleaned parts such that the drained solvent is returned to the cleaning machine.Low VOC cleaners (as defined in County Rule 331) are exempt from the above requirements.
[County Rule 331 §305] [SIP Rule 331 §305]
 - 2) The Permittee shall equip each batch cleaning machine without a remote reservoir with all of the following:

- a) Have and use an internal drainage rack or other assembly that confines within the freeboard all cleaning-solvent dripping from parts and returns it to the hold of the cleaning machine (degreaser).
- b) Have an impervious cover which when closed prevents cleaning-solvent vapors in the cleaning machine from escaping into the air/atmosphere when not processing work in the cleaning machine. The cover shall be fitted so that in its closed position the cover is between the cleaning-solvent and any lip exhaust or other safety vent, except that such position of cover and venting may be altered by an operator for valid concerns of flammability established in writing and certified to by a Certified Safety Professional or a Certified Industrial Hygienist to meet health and safety requirements.
- c) The freeboard height shall be not less than 6 inches (15.2 centimeters). Freeboard height for batch cleaning machines is the vertical distance from the solvent/air interface to the least elevated point of the top-rim when the cover is open or removed, measured during idling mode.
- d) The freeboard zone shall have a permanent, conspicuous mark that locates the maximum allowable solvent level which conforms to the applicable freeboard requirements.

Low VOC cleaners (as defined in County Rule 331) are exempt from the above requirements.

[County Rule 331 §305.2] [SIP Rule 331 §302.2]

G. SPECIAL NON-VAPOR CLEANING SITUATIONS

- 1) When blasting or misting with conforming solvent, the Permittee shall operate and equip the device(s) as follows:
 - a) The device shall have internal drainage, a reservoir or sump, and a completely enclosed cleaning chamber, designed so as to prevent any perceptible liquid from emerging from the device; and
 - b) The device shall be operated such that there is no perceptible leakage from the device except for incidental drops from drained, removed parts.

[County Rule 331 §307.1] [SIP Rule 307.1]
- 2) The Permittee shall use a sealed system for all blasting or misting with a non-conforming solvent.

[County Rule 331 §307.2] [SIP Rule 307.2]
- 3) Cleaning systems using cleaning-solvent that emerges from an object undergoing flushing with a visible mist or at a pressure exceeding 10 psig, shall comply as follows:
 - a) For conforming solvents, use a containment system that is designed to prevent any perceptible cleaning-solvent liquid from becoming airborne outside the containment system, such as a completely enclosed chamber.
 - b) Use a sealed system for non-conforming solvents.

[County Rule 331 §307.3]

H. MONITORING/RECORDKEEPING:

- 1) The Permittee shall maintain a current list of cleaning-solvents; state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material. For any cleaning solvent subject to solvent specifications for non-vapor cleaning and

degreasing (VOC vapor pressure not exceeding 1 millimeter of mercury column), the facility shall maintain documentation showing the total VOC vapor pressure of each such solvent. Documentation shall include a manufacturer's technical data sheet, material safety data sheet or actual test results.

- 2) The Permittee shall record the amount of cleaning-solvent used at the end of each month for the previous month. Permittee shall show the type and amount of each make-up and all other cleaning-solvent.
- 3) Annually the Permittee shall document the use of concentrate that is used only in the formulation of Low VOC Cleaner.
- 4) Permittee need not keep a record of a cleaning substance that is made by diluting a concentrate with water or non-precursor compound(s) to a level that qualifies as a low VOC cleaner if records of the concentrate usage are kept in accordance with this permit.
- 5) The Permittee may, for purposes of recording usage, give cleaning-solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all products in that group is then recorded under just one name. (In such case the Permittee shall also keep a separate list that identifies the product names of the particular solvents included under the group name.) To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10th of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.

[County Rule 331 §501] [SIP Rule 331 §501]

I. REPORTING:

The Permittee shall include the following information in each semiannual monitoring report;

- 1) certification that the operational requirements, specifically applicable to the Permittee's type of cleaning, continue to be in compliance;
- 2) a summary of the listed cleaning-solvents currently used at the facility and the VOC-content of each in VOC per gallon of material or grams per liter of material;
- 3) certification that monthly and annual recordkeeping was performed as directed in the monitoring/recordkeeping requirements above;
- 4) a summary of any testing that may have been performed during the period;
- 5) quantity of each cleaning solvent used; and
- 6) any new or updated Material Safety Data Sheet.

[County Rule 210 302.1e(1)]

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APPENDIX A

MAJOR EQUIPMENT LIST

Mesquite Generating Station

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The facility consists of the following major emitting equipment:

- 1) Two (2) power blocks (Combined Cycle Systems), each in a two-on-one configuration. Each of the two-on-one combined cycle power blocks will consist of the following:
 - a. Two (2) General Electric 7FA Combustion Turbines with an ambient design conditions rating of 180 megawatts (MW) fueled by pipeline quality natural gas only, equipped with dry low-NO_x burners. Each Combustion Turbine has a heat input of approximately 1,630 – 1,730 mmBtu/hr at 73°F.
 - b. Two (2) supplementary fired Heat Recovery Steam Generators (HRSG) with duct burners fueled by pipeline quality natural gas only. The steam produced by the HRSGs is delivered to a single steam turbine with a nameplate rating of 290 MW. HRSGs are equipped with:
 - (1) Selective Catalytic Reduction NO_x emissions control systems capable of treating the entire exhaust of the Combustion Turbines and Duct Burners combined, and
 - (2) Oxidizing catalyst CO emissions control systems.
 - c. Two (2) CEMS that record at a minimum NO_x, CO, and oxygen content of the exhaust.
 - d. Two (2) exhaust stacks each with a height 170 feet above plant grade and inside diameters of 18 feet.
- 2) Cooling Towers
 - a. Two (2) wet mechanical draft cooling towers with a design circulating water flows of 163,050 gallons per minute each and heights of 45 feet above plant grade.
 - b. Drift eliminators.
 - c. Continuous cooling water conductivity monitoring system.
- 3) Fire Water Pump Engine
 - a. One (1) 348-horsepower No. 2 fuel-oil fired engine to drive the emergency fire water pump.

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APPENDIX B

PERMIT SHIELD APPLICABLE REQUIREMENTS

Mesquite Generating Station

Regulation II Permits and Fee

| Rule 200 | Permit Requirements (8/22/01 revision) |
|-----------------|---|
| § 301 | Permits Required |
| § 302 | Title V Permit |
| § 305 | Earth Moving Permit |
| § 306 | Permit to Burn |
| § 310 | Prohibition – Permit Modification |
| § 311 | Permit Posting Required |

| Rule 210 | Title V Permit Provisions (05/07/03 revision) |
|-----------------|--|
| § 402 | Permit Term |
| § 403 | Source Changes Allowed without Permit Revisions |
| § 404 | Administrative Permit Revisions |
| § 405 | Minor Permit Revisions |
| § 406 | Significant Permit Revisions |
| § 407 | Permit Shields |

| Rule 270 | Performance Tests (11/15/93 revision) |
|-----------------|---|
| § 301 | Performance Tests Required (approved test methods) |
| §301.1 | Applicable Procedures and Testing Methods |
| § 301.2 | Opacity determined by Reference Method 9 of the AZ Testing Manual |
| § 401 | Performance Tests Required |
| § 402 | Testing Criteria |
| § 403 | Testing Conditions |
| § 404 | Notice of Testing |
| § 405 | Testing Facilities Provided |
| § 406 | Minimum Testing Required |
| § 407 | Compliance with the Emission Limits |
| § 408 | Additional Testing |

Regulation III Control of Air Contaminants

| Rule 300 | | Visible Emissions (2/7/01 revision) |
|-----------------|-------|---|
| | § 301 | Limitations – Opacity/General: Opacity ≤ 20% |
| | § 302 | Exceptions |
| | § 501 | Compliance Determination – Opacity |
| | § 502 | Compliance Determination – Opacity of Visible Emissions from Intermittent Sources |

| Rule 310 | | Fugitive Dust (4/7/04 revision) |
|-----------------|-------|---|
| | § 301 | Opacity Limitation for Dust Generating Operations |
| | § 302 | Stabilization Requirements for Dust Generating Operations |
| | § 303 | Dust Control Plan Required |
| | § 304 | Elements of a Dust Control Plan |
| | § 305 | Dust Control Plan Revisions |
| | § 306 | Control Measures |
| | §307 | Project Information Sign |
| | § 308 | Work Practices |
| | § 401 | Dust Control Plan Posting |
| | § 501 | Compliance Determination |
| | § 502 | Recordkeeping |
| | § 503 | Records Retention |
| | § 504 | Test Methods Adopted by Reference |

| Rule 312 | | Abrasive Blasting (7/2/03 revision) |
|-----------------|------|--|
| | §301 | Limitations |
| | §302 | Requirements for Unconfined Blasting |
| | §303 | Requirements for Confined Blasting |
| | §304 | Opacity Limitation |
| | §305 | Wind Event |

| Rule 312 | | Abrasive Blasting (7/2/03 revision) |
|-----------------|------|---|
| | §306 | Wind Event |
| | §307 | Traffic Markers |
| | §308 | Work Practices |
| | §501 | Recordkeeping and Reporting |
| | §502 | Records Retention |
| | §503 | Compliance Determination |
| | §504 | Certified Abrasives List Adopted by Reference |
| | §505 | Opacity Observations |
| | §506 | Test Methods Adopted by Reference |

| Rule 315 | | Spray Coating Operations (11/17/99 revision) |
|-----------------|-------|---|
| | § 301 | Controls Required |
| | § 302 | Exemptions |
| | §501 | Test Methods Adopted by Reference |

| Rule 320 | | Odors and Gaseous Air Contaminants (7/2/03 revision) |
|-----------------|-------|---|
| | § 300 | Standards |
| | §301 | Animal and Vegetable Matter Reduction |
| | § 302 | Material Containment Required |
| | §303 | Reasonable Stack Height Required |
| | § 304 | Limitation – Hydrogen Sulfide |
| | § 305 | Permit Conditions – High Sulfur Oil |
| | § 306 | Limitation – Sulfur from Other Industries |
| | § 307 | Operating Requirements – Asphalt Kettles and Dip Tanks |

| | |
|-----------------|--|
| Rule 324 | Standard Internal Combustion (IC) Engines (10/23/03 revision) |
| § 300 | Standards |
| §301 | Limitations for New and Existing Stationary IC Engines |
| § 303 | Limitations - Opacity |
| §502.1 | Recordkeeping/Records Retention (record of engine data) |
| § 502.4 | Recordkeeping/Records Retention (records of operating and fuel data) |

| | |
|-----------------|---|
| Rule 331 | Solvent Cleaning (4/21/04 revision) |
| § 301 | Solvent Handling Requirements |
| § 302 | Equipment Requirements for All Cleaning Machines |
| § 303 | Specific Operating and Signage Requirements for Cleaning Machines |
| § 304 | Solvent Specifications for Non-vapor Cleaning and Degreasing |
| § 305 | Non-Vapor Batch Cleaning Machines |
| § 306 | Non-Vapor In-Line Cleaning |
| § 307 | Special Non-Vapor Cleaning Situations |
| § 501 | Recordkeeping and Reporting |
| § 502 | Compliance Determination and Test Methods |

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

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State Requirements

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

| | |
|---------------------------------|---|
| R18-2-719.C.1 (R9-3-519.C.1) | For 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. |
|---------------------------------|---|

This provision is applicable only to the diesel-fueled fire water pump engine. The other fuel burning equipment (Combined Cycle Systems) are not “existing” equipment since a New Source Performance Standard applies (definition of “existing source”, R18-2-101.38).

Federal Requirements

**New Source Performance Standards General Provisions
(40 CFR Part 60 Subpart A)**

| | |
|----------------------|--|
| § 60.7(a)- (f) | Notification and Recordkeeping |
| § 60.8 | Performance Tests |
| § 60.13 | Monitoring |
| § 60.11(b), (c), (d) | Compliance with Standards and Maintenance Requirements |
| § 60.19 | Notification and Reporting |

**New Source Performance Standards – Standards of Performance for Electric Utility Steam
Generating Units for Which Construction is Commenced After September 18, 1978 (40 CFR Part
60 Subpart Da)**

| | |
|-------------------|---|
| § 60.42Da | Standard for Particulate Matter |
| § 60.43Da(b), (g) | Standard for Sulfur Dioxide |
| § 60.44Da(d)(1) | Standard for Nitrogen Oxides |
| § 60.48Da | Compliance Provisions |
| § 60.49Da(o) | Emission Monitoring |
| § 60.50Da | Compliance Demonstration Procedures and Methods |
| § 60.51Da | Reporting Requirements |
| §60.52Da | Recordkeeping Requirements |

**New Source Performance Standards – Standards of Performance for Stationary Gas Turbines (40
CFR Part 60 Subpart GG)**

| | |
|----------------------------|------------------------------|
| § 60.332(a) and (b) | Standard for Nitrogen Oxides |
| § 60.333 | Standard for Sulfur Dioxide |
| § 60.334(b), (h), (i), (j) | Monitoring of Operations |
| § 60.335 | Test Methods and Procedures |

NESHAP Program (40 CFR Part 61)

| | |
|--|--|
| Subpart M National Emission Standard for Asbestos | |
| § 61.145(a)(2) | Standard for demolition and renovation |

| | |
|--|---|
| § 61.145(b)(1), (2), (3)(i) and (3)(iv), (4)(i) through (vii) and (4)(ix) and (4)(xvi) | Notification requirements when demolition involves less than 80 linear meters on pipes and less than 15 square meters on other services and less than one cubic meter off facility components of regulated asbestos containing material (RACM) where the length or area could not be measured previously or there is no asbestos. |
|--|---|

Compliance Assurance Monitoring Program (40 CFR Part 64)

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|---|----------------------------|
| 40 CFR Part 64 Compliance Assurance Monitoring | |
| § 64.3 | Monitoring design criteria |

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. |
| Part 68 | Chemical Accident Prevention Provisions |

Protection of Stratospheric Ozone (40 CFR Part 82)

| | |
|--|-----------------------------|
| Subpart F Recycling and Emissions Reduction | |
| § 82.161 | Technician Certification |
| § 82.166 | Reporting and Recordkeeping |

| | |
|--|---|
| 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 |

APPENDIX C

PERMIT SHIELD NON-APPLICABLE REQUIREMENTS

Mesquite Generating Station

Identified below are *some* of the federal, state and local air pollution control requirements that do NOT apply to the Permittee at the time the permit is issued because the operations subject to these rules will not occur at the Mesquite Generating Station. The list is not all inclusive and there may be additional requirements that do not apply but are not listed in this Appendix C of this permit.

**Federal Rules Not
Applicable to the Mesquite Generating Station**

| | |
|----------------------|---|
| 40 CFR 60 Subpart D | Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 |
| 40 CFR 60 Subpart Db | Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units |
| 40 CFR 75.17 | Affected Units Exhausting through a Common Stack |
| 40 CFR §60.45Da | Standard for Mercury (applies to coal-fired units) |

County and Federally Enforceable SIP Rules Not Applicable to the Mesquite Generating Station

| | |
|-----------------|---|
| County Rule 322 | Applies to Power Plant operations for which construction commenced prior to May 10, 1996. |
|-----------------|---|

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END OF PERMIT