

PROPOSED DRAFT – 11/7/2006

**New Harquahala Generating Company, LLC
HARQUAHALA GENERATING PROJECT**

2530 North 491st Avenue
Tonopah, Arizona 85354

Permit Number V99-015

Incorporates Minor Mods 1-17-02-01, 9-27-02-01 and 11-22-02-01

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New Harquahala Generating Company, LLC HARQUAHALA GENERATING PROJECT Permit Number V99-015

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. The 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.

- 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.

- 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.

[County Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

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

A. ACID RAIN: [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.

[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.

[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.
- 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 §407.3]

[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;
- 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:

18. ALLOWABLE EMISSION LIMITS:

The allowable emission limits of these Permit Conditions are based upon the facility as currently permitted. 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.

A. EMISSION LIMITATIONS FOR COMBINED CYCLE UNITS:

The Permittee shall not cause, allow, or permit emissions from Combined Cycle Units CTG1, CTG2, and CTG3 to exceed the emission limits shown in Tables 1, 2, 3, and 4 below.

**Table 1
 Rolling Total Emission Limits**

Device	Rolling 365-day Total Emission Limits (tons)		Rolling 12-month Total Emission Limits (tons)		
	NOx	CO	SO ₂	PM-10	VOC
Combined Cycle Unit CTG1	108	192	23	97	34
Combined Cycle Unit CTG2	108	192	23	97	34
Combined Cycle Unit CTG3	108	192	23	97	34

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

**Table 2
 Hourly Emission Limits During Periods When a Combined Cycle Unit Operates in Conditions Other than Startup, Shutdown, or Tuning/Testing**

Device	Emission Limits (pounds per hour, 1-hour average)				
	NOx	CO	SO ₂	PM-10	VOC
Combined Cycle Unit CTG1	25.0	37.0	5.8	24.0	7.8
Combined Cycle Unit CTG2	25.0	37.0	5.8	24.0	7.8
Combined Cycle Unit CTG3	25.0	37.0	5.8	24.0	7.8

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

Table 3
Emission Limits for a Single Combined Cycle Unit
During Periods of Startup, Shutdown, and Tuning/Testing

		Emission Limits			
		Pounds per hour, 1-hour average			Pounds per event
Device	Condition	NOx	CO	VOC	CO
Combined Cycle Units 1-3	Cold Start	220	2,300	440	3,000
Combined Cycle Units 1-3	Warm/Hot Start/Shutdown	151	2,300	237	2,600
Combined Cycle Units 1-3	Tuning/Testing	151	2,300	237	2,600

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

Table 4
Additional Concentration or Rate Emission Limits

Device	Emission Limits				
	NOx	CO	PM-10 Total (Filterable plus Condensable)	VOC	Ammonia
Each Combined Cycle Unit CTG1, CTG2 or CTG3 Exhaust	2.5 ppmvd corrected to 15% O ₂ 3-hour rolling average ¹	10 ppmvd corrected to 15% O ₂ 3-hour rolling average ¹	0.0143 lb/MMBtu 3-hour average	2.8 ppmvd corrected to 15% O ₂ 3-hour average ¹	10 ppmvd corrected to 15% O ₂ 24-hour average ²

1) Not applicable during periods of startup, shutdown, and tuning/testing as defined in Condition 19.B.2,

2) As required by Condition 22.A, compliance shall be determined as the average of three separate test runs each not less than one hour in duration.

[County Rule 240 §308.1a, d, e] [40 CFR 52.21(j)] [County Rule 360 §301.40] [40 CFR 60.332(a)(1)]

B. EMISSION LIMITATIONS FOR COOLING TOWERS:

- 1) The Permittee shall not cause, allow, or permit emissions to exceed rolling total emission limits for Cooling Tower 1 and Cooling Tower 2 shown in Table 5.

**Table 5
 Rolling Total Emission Limits**

	Rolling 12-month Total Emission Limits (tons)
Device	PM-10
Cooling Tower 1	3.1
Cooling Tower 2	3.1

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

C. EMISSION LIMITATIONS FOR THE FIREWATER PUMP ENGINE AND EMERGENCY GENERATOR:

The Permittee shall not discharge into the ambient air from either the Firewater Pump Engine or the Emergency Generator emissions that exceed 20 percent opacity.

[County Rule 324 §303] [locally enforceable only]

D. GENERALLY APPLICABLE EMISSION LIMITATIONS:

- 1) **Offsite Sulfur Oxide Limits:**
 The Permittee shall not emit into the ambient air any sulfur oxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding the limits shown in Table 6.

**Table 6
 Sulfur Oxide Ambient Concentration Limits**

Concentration of Sulfur Dioxide ($\mu\text{g}/\text{m}^3$)	Averaging Time (hours)
850	1
250	24
120	72

[SIP Rule 32.F]

- 2) **Particulate Matter Limits:**

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel from any emissions unit 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 31.H.1.a]

3) Opacity Limits:

- a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20 percent opacity except as provided in County Rule 300, §302.2.

[County Rule 300 §§301, 302] [locally enforceable only]

- b) 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]

19. OPERATIONAL REQUIREMENTS:

A. FACILITY-WIDE OPERATIONAL REQUIREMENTS:

- 1) Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalis, 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] [SIP Rule 32.C]

- 2) 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] [SIP Rule 32.D]

- 3) 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] [SIP Rule 32.A]

B. OPERATIONAL REQUIREMENTS FOR COMBINED CYCLE UNITS:

- 1) Fuel Restriction

The Permittee shall combust only pipeline quality natural gas in Combined Cycle Units CGT1, CGT2, and CGT3. The total sulfur content of the pipeline quality natural gas shall not exceed 0.0075 grains per standard cubic foot over any averaging period and 0.005 grains per standard cubic foot calculated as a 12-month rolling average.

[County Rule 240 §308.1a, d, e] [40 CFR 52.21(j)] [County Rule 320 §305] [40 CFR 60.333(b)]

- 2) Startup, Shutdown, Testing and Tuning Operating Conditions

- a) Startup is defined as the period between when a Combined Cycle Unit is initially started and fuel flow is indicated until Combustion Turbine generation increases above 50% of rated capacity and the fuel system confirms, via digital signal, “Final Mode” of operations has been established. Rated capacity means the combustion gas turbine’s nameplate electrical power output capacity in megawatts (MW) adjusted to current inlet conditions. Cold startup is defined as a startup that occurs when the steam turbine rotor temperature is less than 302 degrees Fahrenheit (150 degrees Centigrade). Hot startup or warm startup is defined as a startup that occurs when the steam turbine rotor temperature is 302 degrees Fahrenheit (150 degrees Centigrade) or greater. For the purpose of emission limit applicability, the total duration of any Combined Cycle Unit startup event (cold, hot or warm startup) shall not exceed 5 hours, except that the Permittee is allowed up to 3 startup events per calendar year lasting longer than 5 hours but not to exceed 8 hours. Restart of a Combined Cycle Unit following a unit trip or aborted startup constitutes a new startup period.

- b) Shutdown is defined as the period during a Combined Cycle Unit shutdown sequence beginning when the operator initiates the shutdown of the unit and the fuel system confirms, via digital signal, that the units is no longer operating in Final Mode operations and ending when all combustion has ceased. In the event of a unit trip or aborted startup, shutdown begins when the combustion turbine drops off Final Mode operations and ends when all combustion has ceased. Restart of a Combined Cycle Unit following a unit trip or aborted startup constitutes a new startup period.

- c) Tuning and testing operations include, but are not limited to, periodic tuning of dry low-NOx (DLN) combustors and selective catalytic reduction (SCR) systems and generator certification testing. Tuning and testing operations subject to the emission limitations in Table 3 of Condition 18.A shall not exceed 50 hours per calendar year per Combined Cycle Unit. Periods of tuning and testing during which Combined Cycle Unit emissions do not exceed the applicable limitations in Tables 2 and 4 of Condition 18.A shall not be counted toward the 50 hour annual limit. No more than one Combined Cycle Unit shall be in tuning or testing mode at any time.

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

- 3) At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Combined Cycle Units 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 Control Officer which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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

- 4) Within 90 days following issuance of this permit, the Permittee shall develop, maintain on site, and follow a written startup and shutdown plan (SSP) for the Combined Cycle Units which includes manufacturer's recommended operating practices and other relevant information based on engineering evaluation and/or operating experience for startup and shutdown of the Combined Cycle Units and emission control systems. The SSP shall be designed to minimize air pollutant emissions during startup and shutdown events.

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

C. OPERATIONAL REQUIREMENTS FOR THE SELECTIVE CATALYTIC REDUCTION EMISSION CONTROL SYSTEMS:

- 1) The Permittee shall install, operate, and maintain a Selective Catalytic Reduction (SCR) system as part of each Combined Cycle Unit.
- 2) The Permittee shall, at all times, maintain and comply with the Department-approved Operations and Maintenance (O&M) plan included in Appendix D of this Permit for each Combined Cycle Unit SCR system. The Permittee shall revise the O&M plan on an as needed basis or at the direction of the Control Officer. Any revisions to the O&M plan shall be submitted to the Department for approval.
- 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 the temperature specified in the SCR O&M plan.

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

D. OPERATIONAL REQUIREMENTS FOR THE OXIDATION CATALYST EMISSION CONTROL SYSTEMS:

- 1) The Permittee shall install, operate, and maintain an Oxidation Catalyst system as part of each Combined Cycle Unit.
- 2) The Permittee shall, at all times, maintain and comply with the Department-approved Operations and Maintenance (O&M) plan included in Appendix D of this Permit for

each Combined Cycle Unit Oxidation Catalyst system. The Permittee shall revise the O&M plan on an as needed basis or at the direction of the Control Officer. Any revisions to the O&M plan shall be submitted to the Department for approval.

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

E. OPERATIONAL REQUIREMENTS FOR THE COOLING TOWERS:

- 1) The cooling towers shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling towers' vendor to achieve less than 0.0003 percent drift.
- 2) The total dissolved solids (TDS) content of the cooling water in the cooling towers shall not exceed 20,000 ppm.

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

F. OPERATIONAL REQUIREMENTS FOR THE FIREWATER PUMP ENGINE AND EMERGENCY GENERATOR:

- 1) The Permittee shall not cause or allow any fuel to be combusted in the Firewater Pump Engine and Emergency Generator other than commercially available diesel fuel with sulfur content of 0.05 percent by weight or less.
- 2) The Permittee shall operate the Firewater Pump Engine only for emergency conditions or routine maintenance checks.
- 3) The Permittee shall operate the Emergency Generator only for emergency conditions or routine maintenance checks.
- 4) Operation of the Firewater Pump Engine shall not exceed 500 hours per consecutive 12-month period.
- 5) Operation of the Emergency Generator 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 AND RECORDKEEPING REQUIREMENTS:

A. MONITORING AND RECORDKEEPING REQUIREMENTS FOR THE COMBINED CYCLE UNITS:

- 1) The Permittee shall hourly monitor and record the hours of operation and operating mode (startup, shutdown, testing/tuning, or normal operation) of each Combined Cycle Unit; the Combustion Turbine exhaust temperature prior to entering the Selective Catalytic Reduction System; the Combustion Turbine exhaust temperature prior to entering the Oxidation Catalyst System; the amount of natural gas combusted in each of the Combined Cycle Units, and the electrical energy output of each Combustion Turbine.

[County Rule 210 §302.1c, d]

- 2) The Permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the Combined Cycle Units; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
[40 CFR 60.7(b)]
- 3) Continuous Emissions Monitoring System (CEMS) and Continuous Monitoring System (CMS) Requirements
 - a) The Permittee shall install, calibrate, certify (as required by 40 CFR 75.20), maintain and operate CEMS with an automated data acquisition and handling system for measuring and recording emissions of NO_x, CO, and diluent O₂ or CO₂ from each Combined Cycle Unit exhaust. NO_x and CO emissions shall be recorded in parts per million by volume dry basis (ppmvd), pounds per million Btu (lb/MMBtu), and pounds per hour (lb/hr). Diluent O₂ or CO₂ shall be recorded in percent by volume. The CEMS shall be capable of monitoring concentrations and mass emissions during normal operations and during periods of startup, shutdown, and tuning/testing operations. Hourly average, rolling three-hour average, and rolling 365-day total values shall be continuously recorded.
 - b) For the NO_x and O₂ or CO₂ diluent CEMS, the Permittee shall meet the requirements of 40 CFR Part 75, including but not limited to the following:
 - (1) 75.10 – General Monitoring Requirements;
 - (2) 75.12 – Specific Provisions for Monitoring NO_x Emission Rate;
 - (3) Subpart C – Operation and Maintenance Requirements;
 - (4) Subpart D – Missing Data Substitution Procedures;
 - (5) Subpart F – Recordkeeping Requirements;
 - (6) Appendix A – Specifications and Test Procedures;
 - (7) Appendix B – Quality Assurance and Quality Control Procedures;
 - (8) Appendix C – Missing Data Estimation Procedures; and
 - (9) Appendix F – Conversion Procedures.
 - c) Notwithstanding the provisions of Condition 20.A.3.b, 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:
 - (1) 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.
 - (2) Linearity: Monitors with a 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 performance specification in 40 CFR Part 75 shall meet the Relative Accuracy performance specifications and Cylinder Gas Audit (CGA) or Relative Accuracy Audit (RAA) requirements of 40 CFR 60 Appendix F.
 - (3) 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.
- d) For the CO CEMS, the Permittee shall meet the requirements of 40 CFR Part 60, including but not limited to the following:
 - (1) 60.13 – Monitoring Requirements;
 - (2) Appendix B – Performance Specification 4A; and
 - (3) Appendix F – Quality Assurance Procedures.
 - e) The Permittee shall ensure that the CEMS are in operation and monitoring emissions at all times that the Combined Cycle Unit(s) 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 Part 60 and Part 75.
 - f) The Permittee shall prepare and maintain a monitoring plan in accordance with 40 CFR 75.53.
 - g) The Permittee shall operate and maintain each CEMS in accordance with the monitoring plan required by 40 CFR 75.53 and the Operation and Maintenance (O&M) Plan and Quality Assurance Plan (QAP) approved by the Department.
 - h) The Permittee shall ensure that the design, installation, operation, maintenance, O&M/QA Plan(s), and on-site spare parts inventory are sufficient to ensure that the CEMS meet the data capture requirements of 40 CFR Parts 60 and 75.
 - i) The Permittee shall at least annually conduct a RATA and bias check. The annual RATA and bias check shall be conducted within 12 months following the issuance date of this permit and within 12 months following of each subsequent RATA and bias check. The Permittee shall at least quarterly conduct linearity checks and cylinder gas audits (CGA). The Permittee shall at least daily conduct calibration error and drift checks. More frequent audits and checks shall be conducted as required by 40 CFR Parts 60 and 75.
 - j) The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times.
 - k) The Permittee shall re-calibrate any CEMS after any maintenance activity that could affect the system calibration and shall re-certify as required by and within the time periods required by 40 CFR 75.20(b) whenever the Permittee makes a replacement, modification, or change that may significantly affect the ability of the system to accurately measure or record emissions.
 - l) The Permittee shall develop and implement daily, monthly, quarterly, and annual maintenance checklists to ensure proper operation and accuracy of the CEMS. The checklists shall be established as part of the O&M and QA Plans.
 - m) The Permittee shall install, calibrate, certify, maintain, and operate natural gas fuel flow meters on each fuel line to monitor the unit-specific fuel flow to the Combined Cycle Units in accordance with the applicable requirements of 40 CFR Part 75 Appendix D. The output of the fuel flow meters shall be automatically recorded with a data acquisition and handling system.
 - n) The Permittee shall install, calibrate, maintain, and operate on each SCR system monitors to measure the ammonia injection rate. The flow meters 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 will be used in conjunction

with the SCR systems O&M Plan to ensure compliance with the ammonia emission limits in Table 4 and to meet the emissions testing requirements of Table 7.

- o) The Permittee shall maintain a file of all performance testing measurements, performance evaluations, certifications, calibrations, maintenance and adjustments (including completed maintenance checklists), and repairs made to the each continuous monitoring system or device and all other information required by 40 CFR Part 60 and 40 CFR Part 75 recorded in a permanent form for at least five years.

[County Rule 210 §302.1c, d] [40 CFR 60.7(f), 60.13, 60.334(c)] [County Rule 371]
[40 CFR Part 75]

- 4) The Permittee shall determine and record the gross caloric value (GCV) of the pipeline quality natural gas at least once per month in accordance with the procedures in Section 2.3.4.1 or 2.3.4.2 of 40 CFR 75 Appendix D, as applicable.

[County Rule 371] [40 CFR Part 75]

- 5) For the purpose of calculating mass emissions and demonstrating compliance with NO_x and CO mass emissions limits in Condition 18.A, the Permittee shall use the missing data substitution procedures 40 CFR 75 Subpart D and Appendix C. For CO monitoring data, the Permittee shall use the missing data estimation and substitution procedures prescribed for NO_x. Alternatively, the Permittee may calculate mass emissions during periods of CEMS unavailability or inaccuracy by assuming that emissions are equal to the applicable pound-per-hour limitations contained in Tables 2 and 3 of Condition 18.A for normal operation and startup, shutdown, or tuning/testing, respectively.

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

- 6) The Permittee shall calculate NO_x and CO emission rates in lb/MMBtu using the Procedures for NO_x Emission Rate in 40 CFR 75 Appendix F. For CO, the value of K in Equations F-5 and F-6 = 7.266×10^{-8} (lb/dscf)/ppm CO. The Permittee shall calculate NO_x and CO mass emissions (lb/hour) using the calculated lb/MMBtu rates, fuel flow monitor data, and the GCV of the pipeline natural gas in accordance with the procedures for SO₂ emissions contained in 40 CFR 75 Appendix D.

[County Rule 210 §302.1c] [County Rule 371] [40 CFR 75 Appendices D & F]

- 7) The Permittee shall determine and record the total sulfur content of the pipeline quality natural gas used in the Combined Cycle Units 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 in Condition 19.B.1 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 Condition 19.B.1 of this Permit by using measurement methods ASTM D1072-80, 90; D3246-81, 92, 96; D4468-85; or 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.

[County Rule 210 §302.1c] [40 CFR 60.334(h)(4) & (i)(3), §335(b)(10)]

- 8) The Permittee shall calculate SO₂ mass emissions using the fuel sulfur content data, the measured fuel flow rate, and the fuel gross caloric value using the procedures in 40 CFR 75 Appendix D.

[County Rule 210 §302.1c] [County Rule 371] [40 CFR Part 75 Appendix D]

- 9) VOC emissions during from the Combined Cycle Units during normal operating conditions shall be calculated using the emission factors contained in the Permit Application amended on March 28, 2006 and unit-specific fuel usage data, unless an alternative emission rate can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.

- 10) VOC emissions from the Combined Cycle Units during startup, shutdown, and testing/tuning operating conditions shall be calculated based on fuel flow and oxidation catalyst temperature in accordance with the mathematical model contained in the Permit Application amended on March 28, 2006, unless an alternative emission rate can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.

- 11) PM-10 emissions from the Combined Cycle Units during all operating conditions shall be calculated using the emission factor contained in the Permit Application amended on March 28, 2006 and unit specific fuel usage data, unless an alternative emission rate can be demonstrated to the satisfaction of the Control Officer and the Administrator to be more representative of emissions.

- 12) The Permittee shall monitor and record emissions from the Combined Cycle Units in units and averaging times consistent with all emissions limits contained in Condition 18.A. Rolling 365-day total 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 emissions shall be calculated monthly using the data from the most recent 12-month period, with a new 12-month period beginning on the first day of each calendar month. Records of rolling 12-month total emissions shall be completed by the 15th day of each calendar month for the prior 12-month period.

[County Rule 210 §302.1c]

B. MONITORING AND RECORDKEEPING REQUIREMENTS FOR THE EMERGENCY USE ENGINES:

- 1) The Permittee shall record the actual hours of operation and the explanation for use of the Firewater Pump Engine and the Emergency Generator and the nature of the emergency or maintenance check that caused the engine to be used. At the end of each calendar month, the Permittee shall calculate and record the rolling 12-month total hours of operation of each engine. This value shall be calculated as the sum of the monthly hours of operation for the most recent month and the 11 previous months, and shall be recorded within 15 calendar days after the end of each calendar month. In addition, the Permittee shall keep a record that includes an initial one-time entry that lists the Firewater Pump Engine and Emergency Generator combustion type, manufacturer, model designation, rated brake horsepower, serial number and the location of the engine on site.

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

- 2) 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 sulfur content of the fuel;
 - c) the method used to determine the sulfur content of the fuel;
 - d) the date that the fuel was delivered to the site; and
 - e) the date that the fuel was sampled for sulfur content.

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

C. MONITORING AND RECORDKEEPING REQUIREMENTS FOR THE COOLING TOWERS:

- 1) PM-10 emissions from each Cooling Tower shall be calculated from the following equation:

$$\text{PM-10 Emissions (tons/yr)} = \text{Total Recirculation Rate (gallons/minute)} * \text{TDS Concentration (milligrams/liter)} * 1.513\text{E-}10;$$

where:

the value 1.513E-10 is a conversion factor for cooling tower drift rate (0.0003%), grams to tons, liters to gallons, minutes to year, 2.3 percent of total particulate as PM-10; and the Total Recirculation Rate is the total design recirculation rate for all nine cells in one tower.

- 2) Rolling 12-month total emissions shall be calculated monthly using the data from the most recent 12-month period, with a new 12-month period beginning on the first day of each calendar month. Records of rolling 12-month total emissions shall be completed by the 15th day of each calendar month for the prior 12-month period.

- 3) The Permittee shall monthly inspect the Cooling Tower drift eliminators for proper installation, maintenance, and operation. The results of the inspection shall be recorded in a facility log.
- 4) The Permittee shall daily monitor and record the conductivity of the Cooling Tower water and shall monthly monitor and record the Total Dissolved Solids (TDS) content of the cooling tower water.

[County Rule 210 §302.1c]

D. GENERAL FACILITY-WIDE MONITORING AND RECORDKEEPING REQUIREMENTS:

- 1) Visible Emissions
 - a) The Permittee shall conduct a visual inspection of the stack emissions from each Combined Cycle Unit and each Cooling Tower during each week of operation that the equipment was used more than 10 hours.
[County Rule 300] [County Rule 210 §302.1c]
 - b) The Permittee shall conduct a monthly visual inspection of emissions from the Firewater Pump Engine and the Emergency Generator, during normal operation.
 - c) 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:

- (1) Daily:

- a) Except as provided in paragraph 3 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.
 - b) 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 2 of this Permit Condition.
- (2) Weekly:
- a) 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.
 - b) 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 1 of this Permit Condition.
 - c) 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 3 of this Permit Condition are met.
- (3) 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]
- d) Opacity Readings
- (1) Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9.
 - (2) 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 §501 and §502] [locally enforceable only]
- e) The Permittee shall log the following information for all visible emissions observations and Method 9 opacity readings required by this permit:
- (1) The date and time the visible emissions observation or Method 9 opacity reading was taken;
 - (2) The name of the observer;
 - (3) Whether or not visible emissions were present;
 - (4) 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;
 - (5) If visible emissions were present, the identity of the equipment or process with the visible emissions,

- (6) The opacity determined by a Method 9 opacity reading, if a Method 9 reading is required by these permit conditions;
- (7) If applicable, a description of any corrective action(s) taken, including the date of such action(s); and
- (8) Any other related information.

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

2) Odors and Gaseous Air Contaminants

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] [SIP Rule 32] [County Rule 210 §302.1d]

3) In addition to summary information provided in the Compliance Certification and Monitoring Report submitted under Condition 21.D, the Permittee shall maintain on site at least the following information that supports the conclusions reached in the Report:

- a) Hours of operation and amount of fuel burned each hour for each Combustion Turbine and hours of operation of the Firewater Pump Engine and Emergency Generator.
- b) Electrical energy output of each Combustion Turbine for each hour of operation.
- c) Dates on which visible emissions observations were taken, the test method used, and the results of the observations.
- d) Continuous emissions monitoring data related to the emission limits contained in this permit, calibrations, quality assurance, performance demonstrations, and certifications for the reporting period.
- e) Stack emissions test results related to emission limits and/or operational requirements in this Permit.
- f) Cooling Tower inspection log and results of conductivity and TDS monitoring.
- g) Odor log.
- h) Any other records and reports required by any permit condition contained in this Permit.

[County Rule 210 §302.1d]

E. MONITORING TRANSITION:

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, the Permittee shall continue to comply with the monitoring requirements of the previous permit until each corresponding new requirement is met. The Permittee shall notify the Control Officer in writing by mail when all new monitoring requirements have been met.

[County Rule 210 §302.1c(2)]

21. REPORTING REQUIREMENTS:

- A. The Permittee shall file a written notice with the Control Officer as described in 40 CFR 60.7 as follows: 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. Copies of the notifications required by this Permit Condition shall be sent to the Administrator of the United States Environmental Protection Agency (USEPA).

[County Rule 360, §301.1] [40 CFR 60.7(a)]

- B. In addition to the reports filed by the Permittee in accordance with 40 CFR Part 75 Subpart G, the Permittee shall electronically report to EPA the data and information as required by 40 CFR Part 75.64 on a quarterly basis. Quarterly submittals shall include facility data, unit emission data, monitoring data, control equipment data, monitoring plans and quality assurance data and results.

[County Rules 210, 371] [40 CFR 75 Subpart G]

- C. The Permittee shall notify the Control Officer at least 24 hours prior to any scheduled tuning or testing event on any Combined Cycle Unit(s). Notification shall be in written format, and if submitted by facsimile, shall be followed by mailed copy.

[County Rule 210 §302.1e]

- D. The Permittee shall file a Semiannual Compliance Certification and Monitoring Report in accordance with the schedule in the table below. 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.

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 April 30 th or October 31 st , 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 March 31 st or September 30 th , whichever is earlier	Report is due by the end of the month following the reporting period (April 30 th or October 31 st , whichever is earlier)
Subsequent Semiannual Compliance Certification and Monitoring reports	Six month periods ending on March 31 st and September 30 th	Reports are due by the end of the month following the reporting period (April 30 th or October 31 st , as applicable)

- 1) 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 Officer, 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) Summary information on the number, duration and cause (including unknown cause, if applicable) of exceedances of the emission limits in Section 18 of this permit and the corrective actions taken.
 - h) Summary information on the number, duration and cause (including unknown cause, if applicable) for NO_x, CO, and diluent CEMS downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).
 - i) 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 and Monitoring 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.
 - j) The Permittee shall comply with applicable reporting requirements for support operations including architectural coating (Permit Condition 24), dust generating operations (Permit Condition 25), abrasive blasting (Permit Condition 26), cold degreasing and wipe cleaning (Permit Condition 27), and cutback & emulsified asphalt (Permit Condition 28).
 - k) 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.
 - l) If visible emissions are identified during a visual emissions 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; and
- e) A description of any corrective actions taken, including the date such action was taken.
- m) If a Method 9 emissions 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; and
 - f) A description of any corrective actions taken, including the date such action was taken.

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

[County Rule 360, §301.1] [40 CFR 60.7(c)]

22. TESTING REQUIREMENTS:

A. SPECIFIC TESTING REQUIREMENTS FOR COMBINED CYCLE UNITS:

The Permittee shall monitor for compliance with the emission limits of Tables 1, 2, and 4 by conducting stack emissions tests as specified in Table 7.

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

Table 7 Stack Emissions Test Requirements

Device to be Tested and Operating Conditions	Pollutant	Method ¹	Frequency
Each Combined Cycle Unit	NOx	RATA testing In accordance with Condition 20.A.(3)(b), (c) & (i) of this permit	In accordance with Condition 20.A.(3)(b), (c) & (i) of this permit
	CO	RATA testing In accordance with Condition 20.A.(3)(d) & (i) of this permit	In accordance with Condition 20.A.(3)(d) & (i) of this permit
Each Combined Cycle Unit when operating either at full load available on the day of testing or at an alternative load level established and approved as part of the pretest protocol ^{2,3}	PM-10 ^{4,5}	Method 201A and 202	Between 11 and 13 months from the date of the last PM-10 test
	VOC	Method 25A and 18	Between 11 and 13 months from the date of the last VOC test
	Ammonia ⁶	EPA Conditional Test Method CTM-027	At the time of next PM-10 test. Subsequent tests shall be performed every three years (within 34 to 38 months of the previous test). In addition, an ammonia test shall be performed within 90 days following complete SCR system catalyst replacement.
Each Combined Cycle Unit when operating at full load available on the day of testing ^{2,3}	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
	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 60.335(a) and (b)]

- 1) "Method" refers to 40 CFR Part 60 Appendix A emissions testing methods.
- 2) Full load available on the day of testing includes operation of the combined cycle unit and any other means of increasing generator output (evaporative coolers, chillers, etc.) unless atmospheric conditions preclude their use.
- 3) During each performance test, the Permittee shall record the combined cycle unit 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.

- 4) For PM-10 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.
- 5) The sampling time and sample volume for each PM-10 test run shall be at least 120 minutes and 1.70 dscm (60 dscf).
- 6) If the catalyst bed in the Selective Catalytic Reduction System is replaced in its entirety at any time, then the Permittee shall notify the Department in writing within two weeks of the replacement. The affected stack(s) shall be tested for ammonia within 90 days of installation of the new catalyst, and every three years thereafter.

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

- 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 7).

[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 REQUIREMENTS:

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 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 29, 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, and 75, and the Acid Rain requirements of Permit Condition 6.A.
- 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 Unit compliance subaccount not less than the total annual actual emissions of SO₂ for the previous calendar year from each Combined Cycle Unit as required by the Acid Rain Program.
- 5) The SO₂ Allowance Allocations and NO_x Requirements for each Combined Cycle Unit are as follows:

Affected Unit	Pollutant	Years 2000 – 2009	Years 2010 and beyond
Combined Cycle Unit Nos. 1, 2 and 3	SO ₂	NA*	NA
	NO _x	These units are not subject to NO _x limits under 40 CFR Part 76	

*NA means no Allocations are available since these are new units.

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

24. PERMIT CONDITIONS FOR ARCHITECTURAL COATINGS:

A. OPERATIONAL LIMITATIONS / STANDARDS:

- 1) The Permittee shall limit the volatile organic compound (VOC) content of architectural coatings as follows:
 - a) Pavement Sealer:
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]
 - b) Non-Flat Architectural Coating:
The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1989, which contains more than 3.2 lbs (380 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed below.
[County Rule 335 §302] [SIP Rule 335 §302]
 - c) Flat Architectural Coating:
The Permittee shall not apply any flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed below.
[County Rule 335 §304] [SIP Rule 335 §304]
 - d) Specialty Coatings:
[County Rule 335 §305] [SIP Rule 335 §305]
The Permittee shall not apply any architectural coating that exceeds the following limits. The limits are expressed in pounds of VOC per gallon of coating as applied, excluding water and any colorant added to tint bases.

<u>COATING</u>	<u>(lb/gal)</u>
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 Polymers	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 Flat Products	3.3
Specialty Primers, Sealers & 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
Wood Preservatives Except Below Ground	2.9

e) Exemptions:

The VOC content requirement of this Permit Condition shall not apply to the following:

- 1) Architectural coatings supplied in containers having capacities of one quart or less.
- 2) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - (a) Below ground wood preservative coatings.
 - (b) Bond breakers.
 - (c) Fire retardant coatings.
 - (d) Graphic arts coatings (sign paints)
 - (e) Mastic texture coatings.
 - (f) Metallic pigmented coatings.
 - (g) Multi-colored paints.
 - (h) Quick-dry primers, sealers and undercoaters.
 - (i) Shellacs.
 - (j) Swimming pool paints.
 - (k) Tile-like glaze coatings.

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

2) Container Labeling:

a) Thinning:

The Permittee shall use only architectural coatings which are in containers carrying a statement of the manufacturer's recommendation regarding thinning of the coatings. Label data may be quantified with either English or metric units. This requirement shall not apply to the thinning of the architectural coatings with water.

Architectural coatings subject to the Federal Insecticide, Fungicide and Rodenticide Act shall not be subject to the labeling requirements of this permit.

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

b) Date of Manufacturer:

Permittee shall use architectural coatings which display the date of manufacture of the contents or a code indicating the date of manufacture on each container. If a code is used then an explanation of each code shall be sent by the Permittee to the Control Officer.

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

3) Equipment Cleanup:

The Permittee shall not use any liquid materials containing more than 10 percent volatile organic compounds for the cleanup of equipment unless:

- a) The used cleaning liquids are collected in a container which is closed when not in use and is disposed of in a manner such that volatile organic compounds are not emitted into the atmosphere.
- b) The equipment is disassembled and cleaned in a solvent vat which is closed when not in use, or cleaning is done by other methods, approved in writing by the Control Officer, which limit evaporation.

[County Rule 330 §305]

4) VOC Containment and Disposal

The Permittee shall not store, discard, or dispose of any VOC or VOC containing material including Architectural Coatings with VOCs in a way intended to cause or allow the evaporation of VOCs to the atmosphere. Reasonable measures shall be taken to prevent such evaporation which include but are not limited to the following:

- a) All materials from which VOCs can evaporate, including fresh solvent, waste solvent, Architectural Coatings with VOCs and solvent-soaked rags and residues, shall be stored in closed containers when not in use.
- b) Such containers one gallon and larger shall be legibly labeled with their contents.
- c) Records of the disposal/recovery of such materials shall be kept. Records of hazardous waste disposal shall be kept in accordance with hazardous waste disposal statutes.

[County Rule 330 §306]

B. RECORDKEEPING

The Permittee shall keep the material list of all coatings used. The material list should contain the name of each coating, short description of the material, pounds of VOCs per gallon of coating, excluding water and colorant added to tint bases and amount used. If the coating is exempt from the volatile organic compounds content requirements, the justification for the determination shall be documented and kept on file.

[County Rule 210 §302.1c, d]

C. REPORTING

The Permittee shall include the following in the Semiannual Compliance Certification and Monitoring Report.

- 1) The report shall contain a material list showing VOC content of each in lb/gallon or grams/liter.
- 2) The report being sent to Division with attention to: Large Sources Compliance Supervisor shall contain a material list and a list of the coatings which are exempt from the volatile organic compounds content requirements

[County Rule 210 §302.1e]

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 and SIP Rule 335 §500]

25. PERMIT CONDITIONS FOR DUST GENERATING OPERATIONS:

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 described 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 25.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 310, as applicable.

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

TABLES OF FUGITIVE DUST CONTROL MEASURES

Table 1

Vehicle Use In Open Areas And Vacant Lots

- a. An owner and/or operator must implement one of the following control measures:
 - 1. Restrict trespass by installing signs; or

2. Install physical barriers such as curbs, fences, gates, posts, signs, shrubs, and/or trees to prevent access to the area.

Table 2
Unpaved Parking Lots

- a. An owner and/or operator must implement one of the following control measures:
 1. Pave;
 2. Apply and maintain gravel, recycled asphalt, or other suitable material, in compliance with Section 302.1 of County Rule 310; or
 3. Apply a suitable dust suppressant in compliance with Section 302.1 of County Rule 310.
- b. Suggested additional control measure for contingency plans:
 1. Limit vehicle speeds to 15 m.p.h. on the site.

Table 3
Unpaved Haul/Access Roads

- a. An owner and/or operator must implement one of the following control measures:
 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; or
 5. Apply a suitable dust suppressant, in compliance with Section 302.2 of County Rule 310.

Table 4
Open Areas And Vacant Lots

- 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 5
Disturbed Surface Areas – Pre-Activity Work Practices

- 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.

26. PERMIT CONDITIONS FOR 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 section 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 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 §301] [SIP Rule 312 §302.4]

3) Controls Required

Any abrasive blasting operation shall use at least one of the following controls:

- a) Confined blasting
- b) Wet abrasive blasting
- c) Hydroblasting
- d) A control measure that is determined by the Control Officer to be equally effective to control particulate emissions.

[SIP Rule 312 §302]

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 unconfined abrasive blasting when the 60-minute average wind speed is greater than 25 miles per hour.

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

6) Traffic Makers

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 owner or operator 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 owner or operator 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 each Semiannual Compliance Certification and Monitoring 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)]

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]

27. PERMIT CONDITIONS FOR THE 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. The 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 331 §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 331 §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) By the 15th day of each calendar month, the Permittee shall record the amount of cleaning-solvent used for the previous month. The record shall include 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 Compliance Certification and 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)]

28. PERMIT CONDITIONS FOR CUTBACK AND EMULSIFIED ASPHALT:

A. OPERATIONAL LIMITATIONS

- 1) The VOC content of asphalt materials shall be limited as follows:
 - a) The Permittee shall not use or apply the following materials for paving, construction, or maintenance of highways, streets, driveways, parking lots, roads, nor shall they be applied onto soil and earthworks:
 - (1) Rapid cure cutback asphalt.
 - (2) Any cutback asphalt material, road oils, or tar which contains more than 0.5 percent by volume VOCs which evaporate at 500⁰F (260⁰C) or less using ASTM Test Method D 402-76.
 - (3) Any emulsified asphalt or emulsified tar containing more than 3.0 percent by volume VOCs which evaporate at 500⁰F (260⁰C) or less as determined by ASTM Method D 244-89.

[County Rule 340 §301] [SIP Rule 340 §301]
 - b) The Permittee shall not store for use any emulsified or cutback asphalt product which contains more than 0.5 percent by volume solvent-VOC unless such material lot includes a designation of solvent-VOC content on data sheet(s) expressed in percent solvent-VOC by volume.

[County Rule 340 §303] [SIP Rule 340 §303]
- 2) The VOC content limitations of this Permit Condition do not apply to the following:
 - a) Asphalt that is used solely as a penetrating prime coat and which is not a rapid cure cutback asphalt. Penetrating prime coats do not include dust palliatives or tack coats.

[County Rule 340 §302.1] [SIP Rule 340 §302.1]
 - b) The Permittee may use up to 3.0 percent solvent-VOC by volume for batches of asphalt rubber which cannot meet paving specifications by adding heat alone only if request is made to the Control Officer, who shall evaluate such requests on a case-by-case basis. The Permittee shall keep complete records and full information is supplied including savings realized by using discarded tires. The Permittee shall not exceed 1100 lbs (500 kg) usage of solvent-VOC in asphalt rubber in a calendar year unless the Permittee can demonstrate that in the previous 12 months no solvent-VOC has been added to at least 95 percent by weight of all the asphalt rubber binder made by the Permittee or caused to be made for the Permittee. This Permit Condition does not apply to batches which yield 0.5 percent or less solvent-VOC evaporated using the test in County Rule 340 § 502.1.

[County Rule 340 §302.3] [SIP Rule 340 §302.3]

B. MONITORING/RECORDKEEPING

The Permittee shall keep daily records of the amount and type of asphaltic/bituminous material containing more than 0.5 percent by volume solvent-VOCs which is used at the facility. Records must show the solvent-VOC content of this material.

Material Safety Data Sheets (MSDS) or technical data sheets shall be kept available for any asphalt materials used at the facility. Records must be maintained in a readily accessible location and must be made available to the Control Officer upon request.

[County Rule 340 §501] [SIP Rule 340 §501] [County Rule 210 §302.1.c.(2)]

C. REPORTING

The Permittee shall include the following information in the Semiannual Compliance Certification and Monitoring Report required by these Permit Conditions:

- 1) A statement as to whether the recordkeeping requirements of these Permit Conditions relating to asphalt usage were met.
- 2) A listing of any asphalt used that exceeded the VOC content limitations of Permit Condition A. 1) of this section and whether the exceedance was covered by an exemption covered by Permit Condition A. 2) of this section or whether it was a deviation from the requirements of this Permit Condition.

[County Rule 210 §302.1.e.(1)]

D. TESTING

If required by the Control Officer the applicable testing procedures contained in County Rule 340 § 502 and SIP Rule 340 § 502 shall be used to determine compliance with these Permit Conditions.

[County Rule 340 §502] [SIP Rule 340 §502]

APPENDIX A

EQUIPMENT LIST

New Harquahala Generating Company, LLC (NHGC)

Equipment List

Major Emitting Equipment

- 1) Three Combined Cycle Units (CTG 1, CTG 2 and CTG 3), each with a heat recovery steam generator (HRSG) and a condensing reheat steam turbine and electrical generator.

Each combined cycle unit consists of the following:
 - a) Siemens-Westinghouse 501G combustion turbine operating in combined-cycle mode with a nameplate rating of 240 megawatts electric and fueled by pipeline quality natural gas only with steam injection power augmentation capability.
 - b) Reheat condensing steam turbine (121 MW).
 - c) Selective Catalytic Reduction (SCR) nitrogen oxides emissions control system and an Oxidation Catalyst system for controlling carbon monoxide emissions.
 - d) Continuous emissions monitor (CEM) system that records at least oxides of nitrogen (NO_x), carbon monoxide (CO), and oxygen (O₂) content of the System exhaust.
 - e) An exhaust stack with height 180 feet above plant grade and inside diameter of 19 feet.
- 2) Wet Cooling Towers
Two nine-cell wet cooling tower, with each cell rated at 15,000 gallons per minute recirculation rate (135,000 gallons per minute total for the cooling tower) and height 47 feet above plant grade.
- 3) Emergency Diesel Engines
 - a) One 450 horsepower diesel-fueled engine to drive the firewater pump.
 - b) One 1,500 kilowatt diesel-fueled emergency generator to provide power to lube oil pumps and critical project systems.

Other Emitting Equipment

- 1) Chemical Storage Equipment (see Appendix B)
- 2) Petroleum Storage Tanks (See Appendix B)
- 3) Solvent Degreasing
 - a) One batch solvent cold cleaning machine (non-vapor)

APPENDIX B

INSIGNIFICANT ACTIVITIES

New Harquahala Generating Company, LLC (NHGC)

NHGC Insignificant Activities List

Chemical Storage		
Description & Storage Location	Name of Chemical Substance	Area in Which Material is Used
Two 1,550 Gal Above Ground Tanks Located West of Cooling Tower A and East of Cooling Tower B	Depositrol (phosphoric acid) BL 5323	Cooling Tower
The tank is located south of the gas compressor building	Ammonia 60,000 gallon storage tank (<20% as ammonia)	SCR Catalyst in HRSG
1,000 gal. Tank in Zero Liquid Discharge area	Calcium Chloride (38%)	Water Treatment
Two 1,550 Gal Above Ground Tanks Located West of Cooling Tower A and East of Cooling Tower B	Flogard POT 6100	Cooling Tower
3,000 gal. Tank in Zero Liquid Discharge area	Klaraide PC1192	Water Treatment
Two 8,500 Gal Above Ground Tanks Located West of Cooling Tower A and East of Cooling Tower B.	Liquichlor (12% Sodium Hypochlorite, sodium hydroxide and sodium chloride)	Cooling Towers
10,000 gal. Tank in Zero Liquid Discharge area	Magnesium chloride (30%)	Water Treatment
One 2,000 gal tank in US Filter area	Sodium Hypochlorite (12.5%)	Water Treatment
Gas Compression (2 compressors, each hold 660 gallons)	Compressor oil	Gas Compressor
19 transformers located throughout site	Dielectric Fluid in Non-PCB Transformers	19 transformers located throughout site
Switchyard and Transformer Breakers 445 lb. Container Total	SF ₆ (Sulfur Hexafluoride)	Switch Yard
280 Gal tote in Zero Liquid Discharge	Kleen mtc 103	Zero Liquid Discharge
Two 8,000 Gal Above Ground Tanks Located West of Cooling Tower A and East of Cooling Tower B; One 250 Gal tank in the USF skid.	Sulfuric Acid	Cooling Towers and water treatment
Zero Liquid Discharge Area - 280 Gallon tote Container Size	Biomate MBC781	Zero Liquid Discharge
Two 300 Gal Totes	Caustic Soda (33%)	Water Treatment
Three 180 gal. Totes	Control OS 5035 (hydrazine)	HRSGs
300 gal. Tote in Zero Liquid Discharge area.	Evaporator Anti-scale Depositrol BL 5306	Water Treatment
280 gal. Tote.	Hypersperse MDC150	Water Treatment

Two 280 gal. Totes in US Filter Area	Optisperse HP3100 (phosphate) 560 gallons	Water Treatment
280 gal. Tote in Zero Liquid Discharge area	Sodium Bisulfate	Water Treatment
280 gal. Tote.	Sodium Bisulfate BetzDearBorn DCL 30	ZLD
280 gal. Tote.	SoliSep MPT 150	Water Treatment
Two 280 Gal Above Ground Tanks Located West of Cooling Tower A and East of Cooling Tower B	Spectrus NX1100 (Magnesium Nitrate and Magnesium Chloride)	Cooling Tower
Three 180 gal. Totes	Steamate NA1321 (Aluminum Hydroxide 19%)	HRSGs
280 gal. totes in Zero Liquid Discharge area	Foamtrol AF2230 (Oxirane/methoxirane polymer with butyl ether)	Zero Liquid Discharge
Two 280 gal. Totes	Polyfloc AE 1125	Water Treatment
280 gal. Tote	Polyfloc AE1125 (Isoparaffinic petroleum distillate)	Water Treatment
400 gal. Tote	Polyfloc AE1701 (Isoparaffinic petroleum distillate and ammonium acetate)	Water Treatment
Three 55 gal. Drums	Corrshield (Sodium molybdate and Sodium Nitrite)	Closed Cooling Water
55 Gal. drum in Zero Liquid Discharge	Kleen mtc 511	Zero Liquid Discharge
55 Gal. drum in Zero Liquid Discharge	Optisperse	Zero Liquid Discharge
Petroleum Storage Tanks		
Tank Designation	Description / Contents	Tank/Container Content (Gallons)
1	Emergency Diesel Generator AST / Diesel	1350 gallon
2	Emergency Diesel Fire Pump AST / Diesel	500 gallon
3	Diesel AST / Diesel	500 gallon diesel
4	Gas Turbine Lube Oil Reservoir / Lube Oil	5,000 gallon (3 on-site)
5	Steam Turbine Lube Oil Reservoir / Lube Oil	3,600 gallon (3 on-site)
6	Gas Turbine Control Oil Reservoir / Lube Oil	100 gallon (3 on-site)
7	Steam Turbine Hydraulic Oil Reservoir / Hydraulic Oil	200 gallon (3 on-site)
8	Gas Turbine Starting Package Oil Reservoir /	1,800 gallon (3 on-site)

Oil		
9	Oil-Water Separator / Oil; petroleum products	1,880 gallon (3 on-site)
10	Used Oil Tank / Oil; petroleum products	385 gallon
11	Main Transformer / Mineral Oil (Non-PCB)	25,620 gallon (3 on-site)
12	Auxiliary Transformer / Mineral Oil (Non-PCB)	2,715 gallon (3 on-site)
13	Oil Rack and Oil Cabinet Lube Oil and petroleum products	1,605 (55-gallon and smaller containers)
Other Activities		
Designation	Description	
Laboratory Fume Hood	Hanson Model 3SA-47, 142 FPM Exhaust	
Power Washer	Small internal combustion (IC) engine < 50 hp	
Lime Storage Silo	Storage Silo controlled by fabric filter; Pneumatically loaded by truck	
Soda Ash Storage Silo	Storage Silo controlled by fabric filter; Pneumatically loaded by truck	

APPENDIX C

PERMIT SHIELD APPLICABLE REQUIREMENTS

New Harquahala Generating Company, LLC (NHGC)

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

For each part, subpart, section, and subsection reference listed, all subsequent sections are assumed applicable. All other subparts or sections not listed are not applicable.

County Requirements
Maricopa County
Air Pollution Control Regulations

Regulation I General Provisions

Rule 100		General Provisions and Definitions (3/15/06 revision)
	§104	Circumvention
	§105	Right of Inspection of Premises
	§106	Right of Inspection of Records
	§301	Air Pollution Prohibited
	§501	Reporting Requirements
	§502	Data Reporting
	§503	Emission Statements Required as Stated in the Act
	§504	Retention of Records
	§505	Annual Emissions Inventory Report

Rule 130		Emergency Provisions (07/26/00 revision)
	§400	Administrative Requirements

Rule 140		Excess Emissions (9/5/01 revision)
	§400	Administrative Requirements
	§500	Monitoring and Records

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 240		Title V Permit Provisions (05/07/03 revision)
§308.1a, d, e		Best Available Control Technology (BACT); Permit Shield applies only to BACT requirements contained in this Permit

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

Rule 270	Performance Tests (11/15/93 revision)
§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 \leq 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

Rule 312		Abrasive Blasting (7/2/03 revision)
	§304	Opacity Limitation
	§305	Wind Event
	§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 320		Odors and Gaseous Air Contaminants (7/2/03 revision)
	§300	Standards
	§302	Material Containment Required
	§303	Reasonable Stack Height Required
	§305	Permit Conditions – High Sulfur Oil

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

Rule 340		Cutback and Emulsified Asphalt (9/21/92 revision)
	§ 301	Limitations
	§ 501	Recordkeeping and Reporting

Rule 360		New Source Performance Standards (3/15/06)
	§301	Adopted Federal Standards
	§301	Subpart A – General Provisions
	§301	Subpart GG – Standard of Performance for Stationary Gas Turbines

Regulation VI Emergency Episodes

Rule 600		Emergency Episodes (7/13/88 revision)
	§302	Control Actions

Appendices

Appendix C		(4/7/04 revision)
	Section 2	Test Methods for Stabilization
	Section 3	Visual Determination of Opacity of Emissions from Sources for the Time-Averaged Regulations

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(d)	Compliance with Standards and Maintenance Requirements
§60.19	Notification and Reporting

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(c), (h), (i), (j)	Monitoring of Operations
§60.335	Test Methods and Procedures

Prevention of Significant Deterioration (40 CFR 52.21)

§52.21(j)	Control Technology Review [Permit Shield applies only to Best Available Control Technology (BACT) requirements contained in this Permit]
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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.

Accidental Release Program (40 CFR Part 68)

CAA §112(r)(1)	General duty to identify, prevent and minimize the consequences of accidental releases of listed and other extremely hazardous substances.
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Part 68	Chemical Accident Prevention Provisions
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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

Federal Requirements
Maricopa County State Implementation Plan (as of 12/31/99)

Regulation I General Provisions

Rule 3 - Air Pollution Prohibited
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Regulation II Permits

Rule 22 – Permit Denial – Action – Transfer – Posting – Revocation – Compliance
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§F – Permit Posting

Rule 27 - Performance Tests

Regulation III Control of Air Contaminants

Rule 30 - Visible Emissions

Rule 31 - Emissions of Particulate Matter
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§§A.1,2,3,4,6,7 - Non-Point Sources of Particulate Matter.
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§H.1.a – Fuel Burning

Rule 32 - Odors and Gaseous Emissions
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§§A, C, D, F

Rule 310 – Fugitive Dust Sources

Rule 312 – Abrasive Blasting

Rule 331 – Solvent Cleaning

Rule 335 – Architectural Coatings
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Rule 340 – Cutback and Emulsified Asphalt
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§§301, 501

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

Rule 40 Recordkeeping and Reporting
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Rule 41 Monitoring

§A

Rule 42 Testing and Sampling

Rule 43 Right of Inspection

Regulation VII Ambient Air Quality Standards

Rule 72	Emergency Episode Criteria
§72e	Air Pollution Alert Actions
§72f	Air Pollution Warning Actions
§72g	Air Pollution Emergency Actions

APPENDIX D

**SCR and CATALYTIC OXIDATION SYSTEM
OPERATION AND MAINTENANCE (O&M) PLANS**

New Harquahala Generating Company, LLC (NHGC)



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APPENDIX E

TECHNICAL SUPPORT DOCUMENT

New Harquahala Generating Company, LLC (NHGC)