



**TITLE V FEDERAL OPERATING PERMIT,
TITLE IV ACID RAIN PROGRAM PERMIT
AND
SMAQMD RULE 201 PERMITS TO OPERATE**

**TITLE V PERMIT NO:
TV2007-12-01A**

**PERMIT
ISSUED:**

June 05, 2008

**PERMIT
LAST AMENDED:**

January 18, 2012

**PERMIT
EXPIRES:**

June 05, 2013

PERMIT ISSUED TO:

Sacramento Cogeneration Authority
PO Box 15830, Mail Stop B355
Sacramento, CA 95852-1830

FACILITY LOCATION:

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NATURE OF BUSINESS:

Municipal Electricity Generation

**STANDARD INDUSTRIAL
CLASSIFICATION (SIC):**

4931

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PERMIT SUMMARY

This permit shall serve as a Permit to Operate pursuant to SMAQMD Rule 201 (General Permit Requirements) and SMAQMD Rule 207 (Title V - Federal Operating Permit Program). Requirements identified in the permit as non-federally enforceable are not enforceable by the U.S. EPA or the public. However, they are enforceable by the SMAQMD.

The permittee's application for this air quality Permit to Operate was evaluated for compliance with SMAQMD, State of California and federal air quality rules and regulations. The following listed rules are those that were found to be applicable at the time of permit review, based on the information submitted with the Title V permit application.

Citation	Description	Rule Adoption Date	Federally Enforceable ?
SMAQMD Rule 101	General Provisions and Definitions	09-03-1998	Yes
SMAQMD Rule 102	Circumvention	05-15-1972	Yes
SMAQMD Rule 105	Emission Statements	04-20-1993	Yes
SMAQMD Rule 201	General Permit Requirements (SIP approved)	11-20-1984	Yes
SMAQMD Rule 201	General Permit Requirements (not SIP approved)	04-26-2001	No
SMAQMD Rule 202	New Source Review (SIP approved)	11-20-1984	Yes
SMAQMD Rule 202	New Source Review (not SIP approved)	02-24-2005	No
SMAQMD Rule 207	Title V - Federal Operating Permit Program (not SIP approved but rule is applicable as part of U.S. EPA approval of the SMAQMD Title V program)	04-26-2001	Yes
SMAQMD Rule 301	Permit Fees - Stationary Source (not SIP approved but Title V fees in rule applicable as part of U.S. EPA approval of the SMAQMD Title V program)	07-02-2007	Yes (Title V provisions only)
SMAQMD Rule 306	Air Toxic Fees (not SIP approved)	03-27-2003	No
SMAQMD Rule 307	Clean Air Act Fees	09-26-2002	Yes

Citation	Description	Rule Adoption Date	Federally Enforceable ?
SMAQMD Rule 401	Ringelmann Chart	04-05-1983	Yes
SMAQMD Rule 402	Nuisance (not SIP approved)	08-03-1977	No
SMAQMD Rule 403	Fugitive Dust	11-29-1983	Yes
SMAQMD Rule 404	Particulate Matter (see permit shield for specified equipment)	11-20-1984	Yes
SMAQMD Rule 406	Specific Contaminants (see permit shield for specified equipment)	11-29-1983	Yes
SMAQMD Rule 411	NOx from Boilers, Process Heaters and Steam Generators (SIP approved) (see permit shield for specified equipment)	10-27-2005	Yes
SMAQMD Rule 411	NOx from Boilers, Process Heaters and Steam Generators (not SIP approved)	08-23-2007	No
SMAQMD Rule 413	Stationary Gas Turbines (see permit shield for specified equipment)	03-24-2005	Yes
SMAQMD Rule 420	Sulfur Content of Fuels (see permit shield for specified equipment)	11-29-1983	Yes
SMAQMD Rule 442	Architectural Coatings (SIP approved)	09-05-1996	Yes
SMAQMD Rule 442	Architectural Coatings (not SIP approved)	05-24-2001	No
SMAQMD Rule 466	Solvent Cleaning (not SIP approved)	05-23-2002	No
SMAQMD Rule 602	Breakdown Conditions: Emergency Variance (not SIP approved)	12-06-1978	No
SMAQMD Rule 701	Emergency Episode Plan	05-27-1999	Yes
SMAQMD Rule 904 and CARB Air Toxic Control Measure	State of California Air Toxic Control Measure for Chromate Treated Cooling Towers [CCR 93103] (not SIP approved)	03-09-1989 (A)	No

Citation	Description	Rule Adoption Date	Federally Enforceable ?
SMAQMD Rule 801 and U.S. EPA New Source Performance Standards (NSPS)	Standards of Performance for Industrial - Commercial - Institutional Steam Generating Units [40 CFR 60 Subpart Db (begin at 60.40b)] (see permit shield for specified equipment)	06-13-2007 (B)	Yes
SMAQMD Rule 801 and U.S. EPA New Source Performance Standards (NSPS)	Standards of Performance for Stationary Gas Turbines [40 CFR 60 Subpart GG (begin at 60.330)] (see permit shield for specified equipment)	02-24-2006 (B)	Yes <u>(prior to gas turbine upgrade)</u>
U.S. EPA New Source Performance Standards (NSPS)	Standards of Performance for Stationary Combustion Turbines [40 CFR 60 Subpart KKKK (begin at 60.4300)] (see permit shield for specified equipment)	07-06-2006 (B)	Yes <u>(after gas turbine upgrade)</u>
U.S. EPA Acid Rain Program	Acid Rain Program [40 CFR 72-78 (begin at 72.1)]	10-19-2007 (B)	Yes

- (A) California Air Resources Board adoption date
- (B) U.S. EPA promulgation/amendment date

Future changes in prohibitory rules may establish more stringent requirements that may, at the SMAQMD level, supersede the conditions listed here. For Title V purposes however, the federally enforceable requirements are those found in the Title V permit. Federally enforceable provisions of the Title V permit do not change until the Title V permit is revised.

FACILITY DESCRIPTION

Permit Background

<u>Permit Action</u>	<u>Date Permit Issued</u>	<u>Title V Permit No.</u>
Initial Title V permit	06-05-2003	TV1997-12-01
1st Significant Modification	05-08-2008	TV1997-12-02
1st Permit Renewal	06-05-2008	TV2007-12-01

Current Permitting Action

This 1st administrative amendment to the 1st permit renewal of the initial Title V Federal Operating Permit that was issued 06-05-2003. The permit number assigned to this Title V permit is TV2007-12-01A.

Facility Description

The Sacramento Cogeneration Authority facility generates electricity for the Sacramento Municipal Utility District (SMUD) and produces process steam for use in the operations of the Procter & Gamble Manufacturing Company. The project is located on a 10-acre site adjacent to the Procter & Gamble manufacturing facility at 5000 83rd Street, Sacramento.

The three gas turbines at the facility are currently undergoing an upgrade to a more energy efficient design. The upgrades to the three gas turbines will be performed in stages. Only one gas turbine at a time will be taken out of service during a non peak time of the year (either spring or fall) to complete the modifications. The upgrades to the gas turbines are projected to be completed by the summer of 2009. After each turbine is upgraded, the allowable NOx emission concentration will be reduced from 5 ppmvd to 2.5 ppmvd (at 15% O2). As a result, the Title V permit will specify conditions for facility emission limits for each stage of the gas turbine upgrades.

The cogeneration facility consists of two major power systems and support equipment. The following description is applicable to the equipment following the proposed physical modification to the gas turbines.

Combined Cycle Power System:

1. (2) General Electric LM6000 gas turbines, 500 MMBTU/hour each, natural gas fuel, with a nominal rating of 50 MW each (*after gas turbine upgrade*).
2. (2) duct burners, 83.2 MMBTU/hour each, natural gas fuel.
3. (2) Heat recovery steam generators and.
4. (1) 45 MW nominal capacity steam turbine generator.
5. (2) Selective catalytic reduction (SCR) NOx air pollution control systems.
6. (2) Oxidation catalyst CO and ROC air pollution control systems.

FACILITY DESCRIPTION (continued)

Simple Cycle Power System:

7. (1) General Electric LM6000 gas turbine, 500 MMBTU/hour, natural gas fuel, with a nominal rating of 50 MW (*after gas turbine upgrade*).
8. (1) Selective catalytic reduction (SCR) NOx air pollution control system.
9. (1) Oxidation catalyst CO and ROC air pollution control system.

Support Equipment:

10. Auxiliary boiler, 108.7 MMBTU/hour.
11. Cooling tower.

Nitrogen oxide emissions from the gas turbines are controlled with water injection and SCR systems to comply with the NOx concentration limit of 2.5 ppmvd at 15% O2. Oxidation catalyst systems have also been installed for the three gas turbines to reduce ROC and CO emissions. Low NOx duct burners are used for NOx control for the HRSGs. Control of NOx in the auxiliary boiler is achieved by low NOx burners and flue gas recirculation.

Fuel used for the gas turbines, duct burners and auxiliary boiler is natural gas with no emergency use fuel. The use of natural gas will reduce sulfur dioxide and PM10 emissions.

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

TITLE V PERMIT MODIFICATIONS AND RENEWAL

1. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for renewal no later than 12 months prior to the expiration date of the Title V permit.
[SMAQMD Rule 207 Section 301.4]
2. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for minor Title V permit modification when applicable. The application shall be submitted after receiving any required preconstruction permit from the SMAQMD and before commencing operation associated with the Minor Title V permit modification.
[SMAQMD Rule 207 Section 301.6]
3. The permittee shall submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for Significant Title V permit modification when applicable. The application shall not be submitted prior to receiving any required preconstruction permit from the SMAQMD but no later than 12 months after commencing an operation associated with the Significant Title V permit modification. Where an existing federally enforceable Title V permit condition would prohibit such change in operation or the stationary source is not required to obtain a preconstruction permit, the owner or operator must obtain a Title V permit modification before commencing operation.
[SMAQMD Rule 207 Section 301.7]
4. The permittee shall submit to the SMAQMD Air Pollution Control Officer timely updates to the Title V application as new applicable federal requirements become applicable to the source.
[SMAQMD Rule 207 Section 302.1]
5. The permittee shall submit to the SMAQMD Air Pollution Control Officer any additional information necessary to correct any incorrect information in the Title V permit application upon becoming aware of such incorrect submittal or if the applicant is notified by the SMAQMD Air Pollution Control Officer of such incorrect submittal.
[SMAQMD Rule 207 Section 302.2]
6. The permittee shall submit to the SMAQMD Air Pollution Control Officer any additional information relating to the Title V application within 30 days if such information is requested in writing by the SMAQMD Air Pollution Control Officer.
[SMAQMD Rule 207 Section 302.3]
7. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted and the stationary source complies with SMAQMD Rule 207 Sections 303.1(a), (b), (c) and (d), in which case the existing Title V permit will remain in effect until the Title V permit renewal has been issued or denied.
[SMAQMD Rule 207 Section 303.2]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

8. Any Title V application form, report, or compliance certification submitted pursuant to a federally enforceable requirement in this permit shall contain certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[SMAQMD Rule 207 Section 304]

9. This Title V permit shall have a 5-year fixed term from the date of issuance. The Title V permit shall have a new 5-year fixed term from the date of final action on reopening if the responsible official chooses to submit to the SMAQMD a complete Title V application for renewal upon reopening of the Title V permit pursuant to Sections 411 or 412 of SMAQMD Rule 207, and the Title V permit is renewed according to the administrative procedures listed in SMAQMD Rule 207 Sections 401 through 408.

[SMAQMD Rule 207 Section 306]

COMPLIANCE

10. The permittee shall comply with all conditions of the Title V permit.

[SMAQMD Rule 207 Section 305.1(k)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the Title V permit.

[SMAQMD Rule 207 Section 305.1(k)(2)]

12. This Title V permit may be modified, revoked, reopened, and reissued, or terminated for cause.

[SMAQMD Rule 207 Section 305.1(k)(3)]

13. The permittee shall furnish to the SMAQMD Air Pollution Control Officer, within a reasonable time, any information that the SMAQMD Air Pollution Control Officer may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit pursuant to SMAQMD Rule 207 Section 411, or to determine compliance with this Title V permit.

Upon request, the permittee shall also furnish to the SMAQMD Air Pollution Control Officer copies of records required to be kept by conditions of this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality.

[SMAQMD Rule 207 Section 305.1(k)(4)]

14. Noncompliance with any federally enforceable requirement in this Title V permit is grounds for Title V permit termination, revocation and reissuance, modification, enforcement action or denial of the Title V permit renewal application. Any violation of the Title V permit shall also be a violation of SMAQMD Rule 207.

[SMAQMD Rule 207 Section 305.1(k)(5)]

15. A pending Title V permit action (e.g. a proposed permit revision) or notification of anticipated noncompliance does not stay any permit condition.

[SMAQMD Rule 207 Section 305.1(k)(6)]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

16. This Title V permit does not convey any property rights of any sort or any exclusive privilege.
[SMAQMD Rule 207 Section 305.1(k)(7)]
17. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the SMAQMD Air Pollution Control Officer or an authorized representative to perform all of the following:
- A. Enter upon the stationary source's premises where this source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Title V permit;
 - C. Inspect at reasonable times, the stationary source, equipment (including monitoring and air pollution control equipment), practices and operations regulated or required under this Title V permit, and;
 - D. As authorized by the Federal Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Title V permit conditions or applicable federal requirements.

[SMAQMD Rule 207 Section 413.1]

REPORTS AND RECORDKEEPING

18. Monitoring Reports

- A. The permittee shall submit to the SMAQMD Air Pollution Control Officer at least once every six months, unless required more frequently by an applicable requirement, reports of all required monitoring.
 - i. All instances of deviations from Title V permit monitoring conditions must be clearly identified in such reports.
- B. The reporting periods for this permit shall be January 01 through June 30 and July 01 through December 31. The reports shall be submitted by July 30 and January 30 following each reporting period respectively.
- C. All required reports must be certified by the responsible official and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[SMAQMD Rule 207 Section 501.1]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

19. Compliance Reports

- A. The permittee shall submit to the SMAQMD Air Pollution Control Officer and U.S. EPA (Air-3, U.S. EPA, Region IX) on an annual basis, unless required more frequently by additional applicable federal requirements such as Section 114(a)(3) and 504(b) (42 U.S.C. Sections 7414(a)(3) and 7661c(b)) of the Federal Clean Air Act, a certification of compliance by the responsible official with all terms and conditions contained in the Title V permit, including emission limitations, standards and work practices.
- B. The reporting period for this permit shall be January 01 through December 31. The report shall be submitted by January 30 following the reporting period.
- C. All required reports must be certified by the responsible official and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- D. The Compliance Certification Report shall include the following:
 - i. The identification of each term or condition of the Title V permit that is the basis of the certification.
 - ii. The method(s) used for determining the compliance status of the source, currently and over the reporting period, and whether such method(s) provides continuous or intermittent data.
 - iii. The status of compliance with the terms and conditions of the Title V permit for the period covered by the certification, based on the method designated in Section D.ii of this condition.
 - iv. Such other facts as the SMAQMD Air Pollution Control Officer may require to determine the compliance status of the source.
 - v. In accordance with SMAQMD Rule 207 Section 305, a method for monitoring the compliance of the stationary source with its emissions limitations, standards and work practices.

[SMAQMD Rule 207 Section 413.4]

- 20. The permittee shall report within 24 hours of detection any deviation from a federally enforceable Title V permit condition not attributable to an emergency. In order to fulfill the reporting requirement of this condition, the permittee shall notify the SMAQMD Air Pollution Control Officer by telephone followed by a written statement describing the nature of the deviation from the federally enforceable permit condition.

[SMAQMD Rule 207 Section 501.3]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

21. All monitoring data and support information required by a federally enforceable applicable requirement must be kept by the permittee for a period of 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the federally enforceable applicable requirements in the Title V permit.

[SMAQMD Rule 207 Section 502.3]

RINGELMANN CHART

22. Except as otherwise provided in SMAQMD Rule 401 Section 100, the permittee shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:

- A. As dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
- B. Of such opacity as to obscure a human observer's view, or a certified calibrated in-stack opacity monitoring system to a degree equal to or greater than No. 1 on the Ringelmann Chart.

[SMAQMD Rule 401 Section 301]

PARTICULATE MATTER

23. The permittee shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

- A. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.
- B. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles and other surfaces which can give rise to airborne dusts;
- C. Other means approved by the SMAQMD Air Pollution Control Officer.

[SMAQMD Rule 403 Section 301]

24. Except as otherwise provided in SMAQMD Rule 406, the permittee shall not discharge into the atmosphere from any source particulate matter in excess of 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot).

[SMAQMD Rule 404 Section 301] [see permit shield for specific equipment - Cooling Tower]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

25. The permittee shall not discharge into the atmosphere particulate matter from the burning of any kind of material containing carbon in a free or combined state, from any single source of emission whatsoever, combustion contaminants in any state or combination thereof exceeding in concentration at the point of discharge: 0.23 grams per dry standard cubic meter (0.1 grains per dry standard cubic foot) of gas calculated to 12% carbon dioxide (CO₂) at standard conditions.

[SMAQMD Rule 406 Section 302] [see permit shield for specific equipment - Gas Turbines and Auxiliary Boiler]

SULFUR COMPOUNDS

26. The permittee shall not discharge into the atmosphere from any single source of emission whatsoever sulfur compounds in any state or combination thereof exceeding in concentration at the point of discharge: sulfur compounds, calculated as sulfur dioxide (SO₂): 0.2% by volume.

[SMAQMD Rule 406 Section 301] [see permit shield for specific equipment - Gas Turbines and Auxiliary Boiler]

27. Except as otherwise provided in SMAQMD Rule 420 Section 110, the permittee shall not burn any gaseous fuel containing sulfur compounds in excess of 1.14 grams per cubic meter (50 grains per 100 cubic feet) of gaseous fuel, calculated as hydrogen sulfide at standard conditions, or any liquid fuel or solid fuel having a sulfur content in excess of 0.5% by weight.

[SMAQMD Rule 420 Section 301] [see permit shield for specific equipment - Gas Turbines and Auxiliary Boiler]

ARCHITECTURAL COATING

28. Any coating applied to stationary structures and their appurtenances, to mobile homes, to pavements, or to curbs, shall meet the requirements of SMAQMD Rule 442.

[SMAQMD Rule 442 (09-05-1996 version)]

29. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired.

[SMAQMD Rule 442 Section 304 (09-05-1996 version)]

30. The permittee shall not use volatile organic compounds for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used.

[SMAQMD Rule 442 Section 305 (09-05-1996 version)]

31. The permittee shall keep a record of all architectural coatings purchased that are not clearly labeled as complying with the VOC content limits contained in SMAQMD Rule 442. Compliance in these cases can be determined by maintaining records of the manufacturer's certifications or by Material Safety Data Sheets (MSDS) that demonstrate compliance with the VOC limits of SMAQMD Rule 442.

[SMAQMD Rule 442 (09-05-1996 version) and SMAQMD Rule 207 Section 305]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

EQUIPMENT BREAKDOWNS

32. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology based emission limitations if the following conditions are met:

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

- i. An emergency occurred and that the permittee can identify the cause(s) of the emergency.
- ii. The permitted facility was at the time being properly operated.
- iii. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Title V permit.
- iv. The permittee submitted notice of the emergency to the SMAQMD Air Pollution Control Officer within two working days of the time when emissions limitations were exceeded due to the emergency. The notice must contain a description of the emergency and corrective actions taken.

B. In any enforcement proceedings, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[SMAQMD Rule 207 Section 414]

33. The permittee shall notify the SMAQMD Air Pollution Control Officer of any occurrence which constitutes an emergency as defined in SMAQMD Rule 207 Section 212 as soon as reasonably possible, but no later than one hour after its detection. If the emergency occurs when the SMAQMD Air Pollution Control Officer cannot be contacted, their report of the emergency shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved and to the extent known the cause(s) of the occurrence.

[SMAQMD Rule 207 Section 501.2]

PAYMENT OF FEES

34. The fee for (1) the issuance of an initial Title V operating permit, (2) the renewal and/or inspection of a Title V operating permit, (3) the modification of a Title V operating permit or (4) an administrative Title V permit amendment shall be based on the actual hours spent by the SMAQMD staff in evaluating the application and processing the operating permit. The fee shall be assessed in accordance with the hourly rate established in SMAQMD Rule 301 Section 308.12.

[SMAQMD Rule 207 Section 305.7 and SMAQMD Rule 301 Section 313]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

35. After the provisions for granting permits as set forth in SMAQMD Rule 207 have been complied with, the permittee will be notified by mail of the fee due and payable and the date the fee is due. If the fee is not paid by the specified due date, the fee shall be increased by one half the amount and the applicant/permittee shall be notified by mail of the increased fee. If the increased fee is not paid within 30 days after notice the application/permit will be canceled/revoked and the applicant/permittee will be notified by mail.
[SMAQMD Rule 207 Section 305.7]

CLEAN AIR ACT FEES

36. After the U.S. EPA determines that the SMAQMD has failed to demonstrate attainment of the one hour ozone ambient air quality standard by the attainment year, the permittee, operating any major stationary source of ROC or NO_x, shall pay the Clean Air Act fees specified by the SMAQMD Air Pollution Control Officer in accordance with SMAQMD Rule 307.
[SMAQMD Rule 307]

EMISSION STATEMENTS

37. The permittee, when operating any stationary source that emits 25 tons or more per year of ROC or NO_x, shall annually provide the SMAQMD Air Pollution Control Officer with a written emission statement showing actual emissions of ROC and NO_x from that source.
[SMAQMD Rule 105]

EMERGENCY EPISODE PLAN

38. The permittee, operating any stationary source that emits more than 50 tons or more per year of ROC or NO_x or 100 tons or more per year of PM₁₀ or CO, shall maintain an approved Emergency Episode Plan and shall implement the provisions of the plan upon declaration of a Stage 1, 2 or 3 episode by the SMAQMD Air Pollution Control Officer.
[SMAQMD Rule 701]

ACCIDENTAL RELEASES

39. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall register and submit to the EPA the required data related to the risk management plan (RMP) for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities and accident prevention regulations promulgated under 40 CFR Part 68 do not limit in any way the general duty provisions under Section 112(r)(1) of the federal Clean Air Act of 1990.
[40 CFR 68]

FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

40. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall comply with the requirements of 40 CFR Part 68 no later than the latest of the following dates as provided in 68.10(a):
- A. June 21, 1999,
 - B. Three years after the date on which a regulated substance is first listed under 68.130, or
 - C. The date on which a regulated substance is first present above a threshold quantity in a process.
- [40 CFR 68]**
41. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
- [40 CFR 68]**
42. If the permittee is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) of the federal Clean Air Act of 1990 as part of the annual compliance certification as required by SMAQMD Rule 207 Section 413.4.
- [40 CFR 68]**

TITLE VI REQUIREMENTS (OZONE DEPLETING SUBSTANCES)

43. The permittee, when opening appliances containing CFCs for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- [40 CFR 82 Subpart F]**
44. Equipment used during the maintenance, service, repair, or disposal of appliances containing CFCs must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- [40 CFR 82 Subpart F]**
45. The permittee, when performing maintenance, service, repair or disposal of appliances containing CFCs must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- [40 CFR 82 Subpart F]**

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

APPLICABILITY

1. The requirements outlined in this section are applicable to the SMAQMD Rule 201 Permits to Operate only and are not an enforceable part of the Title V permit.

SMAQMD RULE 201 PERMIT RENEWAL

2. Permits to Operate issued, pursuant to SMAQMD Rule 201 (non-Title V Permits to Operate), shall be renewed annually on August 22 and upon payment of the permit renewal fee established pursuant to SMAQMD Rule 301.
3. The SMAQMD Air Pollution Control Officer shall review every Permit to Operate upon annual renewal, pursuant to California Health and Safety Code Section 42301(c), to determine that permit conditions are adequate to ensure compliance with, and the enforceability of, SMAQMD rules and regulations applicable to the article, machine, equipment or contrivance for which the permit was issued. Applicable SMAQMD rules and regulations shall include those which were in effect at the time the permit was issued or modified, or which have subsequently been adopted and made retroactively applicable to an existing article, machine, equipment or contrivance, by the SMAQMD Board of Directors. The SMAQMD Air Pollution Control Officer shall revise the conditions, if such conditions are not consistent, in accordance with all applicable rules and regulations.

GENERAL

4. The SMAQMD Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials shall be permitted:
 - A. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this permit to operate, and
 - B. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Permit to Operate, and
 - C. To inspect any equipment, operation, or method required in this Permit to Operate, and
 - D. To sample emissions from the source or require samples to be taken.
5. Legible copies of all SMAQMD Rule 201 permits shall be maintained on the premises with the equipment.

EQUIPMENT OPERATION

6. The equipment shall be properly maintained.
7. This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health and Safety Codes of the State of California or the Rules and Regulations of the Sacramento Metropolitan Air Quality Management District.

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

EQUIPMENT BREAKDOWNS

8. The permittee shall notify the SMAQMD Air Pollution Control Officer of any occurrence which constitutes a breakdown as defined in SMAQMD Rule 602 Section 201 as soon as reasonably possible, but no later than one hour after its detection. If the breakdown occurs when the SMAQMD Air Pollution Control Officer cannot be contacted, the report of breakdown shall be made at the commencement of the next regular working day. The notification shall identify the time, specific location, equipment involved, and to the extent known, the cause(s) of the occurrence.
9. Upon notification of the breakdown condition, the SMAQMD Air Pollution Control Officer shall investigate the breakdown condition in accordance with uniform written procedures and guidelines relating to logging of initial reports on appropriate forms, investigation, and enforcement follow-up. If the occurrence does not constitute a breakdown condition, the SMAQMD Air Pollution Control Officer may take appropriate enforcement action.
10. An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) shall constitute a violation of any applicable emission limitation or restriction prescribed by SMAQMD Rules and Regulations; however, the SMAQMD Air Pollution Control Officer may elect to take no enforcement action if the owner or operator demonstrates to his satisfaction that a breakdown condition exists and the following requirements are met:
 - A. The notification required in SMAQMD Rule 602 Section 301.1 is made; and
 - B. Immediate appropriate corrective measures are undertaken and compliance is achieved, or the process is shutdown for corrective measures before commencement of the next production run or within 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment for which the period shall be 96 hours). If the owner or operator elects to shut down rather than come into immediate compliance, (s)he must nonetheless take whatever steps are possible to minimize the impact of the breakdown within the 24 hour period; and
 - C. The breakdown does not interfere with the attainment and maintenance of any national ambient air quality standard.
11. An occurrence which constitutes a breakdown condition shall not persist longer than the end of the production run or 24 hours, whichever is sooner (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours), unless an emergency variance has been obtained.
12. If the breakdown condition will either require more than 24 hours to correct or persists longer than the end of the production run (except for continuous air pollution monitoring equipment, for which the period shall be 96 hours) the owner or operator may, in lieu of shutdown, request the SMAQMD Air Pollution Control Officer to commence the emergency variance procedure set forth in SMAQMD Rule 602 Section 304.

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

13. No emergency variance shall be granted unless the chairperson of the SMAQMD Hearing Board or other designated member(s) of the SMAQMD Hearing Board finds that:
 - A. The occurrence constitutes a breakdown condition;
 - B. Continued operation is not likely to create an immediate threat or hazard to public health or safety; and
 - C. The requirements for a variance set forth in California Health & Safety Code Sections 42352 and 42353 have been met;
 - D. The continued operation in a breakdown condition will not interfere with the attainment or maintenance of the national ambient air quality standards.
14. At any time after an emergency variance has been granted, the SMAQMD Air Pollution Control Officer may request for good cause that the SMAQMD Hearing Board chairperson or designated member(s) reconsider and revoke, modify or further condition the variance. The procedures set forth in SMAQMD Rule 602 Section 304.1 shall govern any further proceedings conducted under this section.
15. An emergency variance shall remain in effect only for as long as necessary to repair or remedy the breakdown condition, but in no event after a properly noticed hearing to consider an interim or 90 day variance has been held, or 15 days from the date of the subject occurrence, whichever is sooner.
16. Within one week after a breakdown condition has been corrected, the owner or operator shall submit a written report to the SMAQMD Air Pollution Control Officer on forms supplied by the SMAQMD Air Pollution Control Officer describing the causes of the breakdown, corrective measures taken, estimated emissions during the breakdown and a statement that the condition has been corrected, together with the date of correction and proof of compliance. The SMAQMD Air Pollution Control Officer may, at the request of the owner or operator for good cause, extend up to 30 days the deadline for submittal of the report described in this subsection.
17. The burden of proof shall be on the owner or operator of the source to provide sufficient information to demonstrate that a breakdown condition did occur. If the owner or operator fails to provide sufficient information, the SMAQMD Air Pollution Control Officer shall undertake appropriate enforcement action.
18. Any failure to comply, or comply in a timely manner, with the reporting requirements established in SMAQMD Rule 602 Sections 301.1 and 401 shall constitute a separate violation of SMAQMD Rule 602.
19. It shall constitute a separate violation of SMAQMD Rule 602 for any person to file with the SMAQMD Air Pollution Control Officer a report which falsely, or without probable cause, claims that an occurrence is a breakdown condition.

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

ARCHITECTURAL COATINGS

20. The permittee shall comply with the requirements of SMAQMD Rule 466 Solvent Cleaning when using volatile organic compounds for the cleanup of architectural coating application equipment. **[SMAQMD Rule 466 Sections 305 and 302.6 (05-24-2001 version)]**

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

A. EQUIPMENT DESCRIPTION

The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

COMBINED CYCLE POWER BLOCK

Gas Turbine 1A Base Load

Permit No. 20734 (permit number is for reference purposes only - not federally enforceable)
Manufacturer General Electric
Model No. LM6000
Type Combined Cycle
Nominal Rating 50 MW (after gas turbine upgrade)
Heat Input Rating 500 MMBTU/hour (after gas turbine upgrade)
Primary Fuel Natural Gas

Duct Burner 1A, Heat Recovery Steam Generator

Permit No. 11437 (permit number is for reference purposes only - not federally enforceable)
Heat Input Rating 83.2 MMBTU/hour
Primary Fuel Natural Gas

Air Pollution Control System 1A - NO_x

Permit No. 11439 (permit number is for reference purposes only - not federally enforceable)
Control Device Selective Catalytic Reduction
Manufacturer Peerless Manufacturing Co.
Venting Gas Turbine 1A and Duct Burner 1A

Air Pollution Control System 1A - ROC and CO

Permit No. 11442 (permit number is for reference purposes only - not federally enforceable)
Control Device Oxidation Catalyst
Manufacturer W. R. Grace Co.
Venting Gas Turbine 1A and Duct Burner 1A

Gas Turbine 1B Base Load

Permit No. 20735 (permit number is for reference purposes only - not federally enforceable)
Manufacturer General Electric
Model No. LM6000
Type Combined Cycle
Nominal Rating 50 MW (after gas turbine upgrade)
Heat Input Rating 500 MMBTU/hour (after gas turbine upgrade)
Primary Fuel Natural Gas

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

Duct Burner 1B, Heat Recovery Steam Generator

Permit No. 11438 (permit number is for reference purposes only - not federally enforceable)
Heat Input Rating 83.2 MMBTU/hour
Primary Fuel Natural Gas

Air Pollution Control System 1B - NO_x

Permit No. 11440 (permit number is for reference purposes only - not federally enforceable)
Control Device Selective Catalytic Reduction
Manufacturer Peerless Manufacturing Co.
Venting Gas Turbine 1B and Duct Burner 1B

Air Pollution Control System 1B - ROC and CO

Permit No. 11443 (permit number is for reference purposes only - not federally enforceable)
Control Device Oxidation Catalyst
Manufacturer W. R. Grace Co.
Venting Gas Turbine 1B and Duct Burner 1B

SIMPLE CYCLE POWER BLOCK

Gas Turbine 1C Peaking Load

Permit No. 20736 (permit number is for reference purposes only - not federally enforceable)
Manufacturer General Electric
Model No. LM6000
Type Simple Cycle
Nominal Rating 50 MW (after gas turbine upgrade)
Heat Input Rating 500 MMBTU/hour (after gas turbine upgrade)
Primary Fuel Natural Gas

Air Pollution Control System 1C - NO_x

Permit No. 11441 (permit number is for reference purposes only - not federally enforceable)
Control Device Selective Catalytic Reduction
Manufacturer Peerless Manufacturing Co.
Venting Gas Turbine 1C

Air Pollution Control System 1C - ROC and CO

Permit No. 11444 (permit number is for reference purposes only - not federally enforceable)
Control Device Oxidation Catalyst
Manufacturer W. R. Grace Co.
Venting Gas Turbine 1C

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

- B. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC:**
The requirements specified under this section are enforceable by the SMAQMD, U.S. EPA and the public.

All references to "gas turbine upgrade", in the following sections, is the construction authorized by SMAQMD Authority to Construct Nos. 20734, 20735 and 20736 on 02-08-2008. The gas turbines will be upgraded sequentially during annual maintenance periods within an estimated two year period. The intent is to have only one gas turbine out of service for the upgrade at any one time.

COMMISSIONING PERIOD REQUIREMENTS

The following permit conditions, CM1 through CM8, shall only apply to each gas turbine for a defined period of time following the physical modification (upgrade) to the gas turbine (Authority to Construct Nos. 20734, 20735 and 20736). The permit conditions allow for hourly emissions that exceed the on-going emission limits during the commissioning period. The permit conditions are necessary during the commissioning period of each modified gas turbine as adjustments are made to the complex equipment to achieve compliance with the on-going emission limitations.

- CM1. Emissions shall be minimized to the maximum extent feasible during the commissioning period. Conditions Nos. CM1 through CM8 shall only apply during the commissioning period of each gas turbine.
- CM2. Commissioning activities are defined as, but are not limited to, all testing, adjustment, tuning and calibration activities recommended by the equipment manufacturers and the construction contractor to ensure safe and reliable operation of the gas turbines and heat recovery steam generators.
- CM3. The commissioning period shall commence, after modification of an individual gas turbine and only for that gas turbine, when all the mechanical, electrical and control systems are installed and individual system startup has been completed, or when the gas turbine is first fired, whichever occurs first. The commissioning period shall terminate when the gas turbine has completed initial performance testing and is available for commercial operation.
- CM4. At the earliest feasible opportunity, in accordance with the recommendations of the equipment manufacturer and construction contractor, the combustors of each gas turbine that has been modified shall be tuned to minimize emissions.

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

CM5. During the commissioning period of each gas turbine, emissions shall not exceed the following limits:

Pollutant	Maximum Allowable Emissions
	lb/hour, any consecutive 3 hour average
NO _x	21.4
CO	16.8

CM6. All hourly, daily and quarterly emission limits shall remain effective during the commissioning period except for the following:

- A. The NO_x concentration limits in Condition No. B.1 shall not apply during the commissioning period.
- B. The NO_x and CO mass emission limits in Condition No. B.2 shall not apply during the commissioning period.

CM7. During the commissioning period, compliance with the NO_x and CO emission limits in Condition No. B. CM5 shall be demonstrated through the use of a properly operated and maintained continuous emission monitoring system.

CM8. Within 60 days of completion of each turbine's upgrade, the permittee shall perform an ROC, NO_x, PM₁₀ and CO source test and CEM accuracy (RATA) test. A successful completion of this initial startup source test can qualify as an annual compliance test as required by Condition No. B.20.

- A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
- B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the emission testing date.
- C. During the test(s), each gas turbine and duct burner shall be operated at its maximum firing capacity, defined as $\geq 90\%$ of rated heat input capacity and taking into account ambient conditions.
- D. Each gas turbine 1A, 1B and 1C shall also be tested at partial load (50%) for ROC and CO.

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NO_x SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

E. Submit the source test results to the SMAQMD Air Pollution Control Officer within 60 days after the completion of the source test(s).

[SMAQMD Rules 201 and 202]

EMISSION LIMITATION REQUIREMENTS

1A. **Prior to the gas turbine upgrade**, the gas turbines 1A and 1B, duct burners 1A and 1B, and gas turbine 1C shall not emit nitrogen oxides (NO_x) in concentrations greater than the following:

[SMAQMD Rule Nos. 201 and 202]

	Maximum Allowable NO _x Concentration excluding start-ups (as defined in Condition Nos. B.10 and B.11) ppmv, any consecutive 3 hour average
Prior to gas turbine upgrade	5.0

1B. **After the gas turbine upgrade**, the gas turbines 1A and 1B, duct burners 1A and 1B, and gas turbine 1C shall not emit NO_x in concentrations greater than the following:

[SMAQMD Rule Nos. 201 and 202]

	Maximum Allowable NO _x Concentration excluding start-ups (as defined in Condition Nos. B.10 and B.11) ppmv, any consecutive 3 hour average
After gas turbine upgrade	2.5

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

2A. Prior to the gas turbine upgrade, the gas turbines 1A, 1B and 1C and duct burners 1A and 1B shall not exceed the following emission limits:

[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions excluding start-ups (as defined in Condition Nos. B.10 and B.11) lb/hour, any consecutive 3 hour average		
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C
ROC	1.80 (A)	1.80 (A)	1.18 (F)
NOx	9.72 (B)	9.72 (B)	8.22 (B)
SOx	0.32 (C)	0.32 (C)	0.27 (G)
PM10	3.30 (D)	3.30 (D)	2.50 (H)
CO	4.20 (E)	4.20 (E)	3.30 (E)

- (A) Based on a turbine ROC emission factor of 0.00244 lb/MMBTU, duct burner ROC emission factor of 0.0084 lb/MMBTU and firing at full capacity.
- (B) Based on data submitted in the permit application and is monitored by the turbine's NOx CEM system.
- (C) Based on a turbine and duct burner SOx emission factor of 0.0006 lb/MMBTU and firing at full capacity.
- (D) Based on a turbine PM10 emission factor of 0.00555 lb/MMBTU, duct burner PM10 emission factor of 0.0096 lb/MMBTU and firing at full capacity.
- (E) Based on data submitted in the permit application and is monitored by the turbine's CO CEM system.
- (F) Based on a turbine ROC emission factor of 0.00262 lb/MMBTU and firing at full capacity.
- (G) Based on a turbine SOx emission factor of 0.0006 lb/MMBTU and firing at full capacity.
- (H) Based on a turbine PM10 emission factor of 0.00555 lb/MMBTU and firing at full capacity.

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

2B. After the gas turbine upgrade, the gas turbines 1A, 1B and 1C and duct burners 1A and 1B shall not exceed the following emission limits:

[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions excluding start-ups (as defined in Condition Nos. B.10 and B.11) lb/hour, any consecutive 3 hour average		
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C
ROC	1.80 (A)	1.80 (A)	1.18 (F)
NOx	5.37 (B)	5.37 (B)	4.60 (B)
SOx	0.35 (C)	0.35 (C)	0.30 (G)
PM10	3.30 (D)	3.30 (D)	2.50 (H)
CO	7.85 (E)	7.85 (E)	6.73 (E)

- (A) Based on a turbine ROC emission factor of 0.00236 lb/MMBTU, duct burner ROC emission factor of 0.0075 lb/MMBTU and firing at full capacity.
- (B) Based on data submitted in the permit application and is monitored by the turbine's NOx CEM system.
- (C) Based on a turbine and duct burner SOx emission factor of 0.0006 lb/MMBTU and firing at full capacity.
- (D) Based on a turbine PM10 emission factor of 0.0050 lb/MMBTU, duct burner PM10 emission factor of 0.0096 lb/MMBTU and firing at full capacity.
- (E) Based on data submitted in the permit application and is monitored by the turbine's CO CEM system.
- (F) Based on a turbine ROC emission factor of 0.00236 lb/MMBTU and firing at full capacity.
- (G) Based on a turbine SOx emission factor of 0.0006 lb/MMBTU and firing at full capacity.
- (H) Based on a turbine PM10 emission factor of 0.0050 lb/MMBTU and firing at full capacity.

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

3A. **Prior to the gas turbine upgrade**, emissions from the following equipment at the facility shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns					
	lb/day					
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C	Auxiliary Boiler	Cooling Tower	Total
ROC	43.2	43.2	28.3	9.8	NA	124.5
NOx	233	233	203.8	27.6	NA	697.3
SOx	7.7	7.7	6.5	1.8	NA	23.7
PM10	79.2	79.2	60	13.1	7	238.5
CO	113.4	113.4	85.1	170.8	NA	482.7

3B. **After the gas turbine upgrade**, emissions from the following equipment at the facility shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns					
	lb/day					
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C	Auxiliary Boiler	Cooling Tower	Total
ROC	43.2	43.2	28.3	9.8	NA	124.5
NOx	144.9	144.9	120.3	27.6	NA	437.7
SOx	8.4	8.4	7.2	1.8	NA	25.8
PM10	79.2	79.2	60	13.1	7	238.5

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns					
	lb/day					
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C	Auxiliary Boiler	Cooling Tower	Total
CO	197.3	197.3	163.9	170.8	NA	729.3

4A. **Prior to the gas turbine upgrade**, emissions from the following equipment at the facility shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns				
	Combined Emissions from: Gas Turbine 1A, 1B and 1C Duct Burner 1A and 1B Auxiliary Boiler Cooling Tower				
	Quarter 1 lb/quarter	Quarter 2 lb/quarter	Quarter 3 lb/quarter	Quarter 4 lb/quarter	Total lb/year
ROC	8,287	8,380	8,472	8,472	33,611
NOx	49,051	49,590	50,128	50,128	198,897
SOx	1,722	1,741	1,760	1,760	6,983
PM10	17,220	17,411	17,603	17,603	69,837
CO	29,758	30,082	30,407	30,407	120,654

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

4B After the first combined cycle gas turbine upgrade, emissions from the following equipment at the facility shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns				
	Combined Emissions from: Gas Turbine 1A, 1B and 1C Duct Burner 1A and 1B Auxiliary Boiler Cooling Tower				
	Quarter 1 lb/quarter	Quarter 2 lb/quarter	Quarter 3 lb/quarter	Quarter 4 lb/quarter	Total lb/year
ROC	8,287	8,380	8,472	8,472	33,611
NOx	41,207	41,658	42,110	42,110	167,084
SOx	1,791	1,811	1,831	1,831	7,263
PM10	17,220	17,411	17,603	17,603	69,837
CO	37,041	37,447	37,852	37,852	150,192

4C. After the second combined cycle gas turbine upgrade, emissions from the following equipment at the facility shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns				
	Combined Emissions from: Gas Turbine 1A, 1B and 1C Duct Burner 1A and 1B Auxiliary Boiler Cooling Tower				
	Quarter 1 lb/quarter	Quarter 2 lb/quarter	Quarter 3 lb/quarter	Quarter 4 lb/quarter	Total lb/year
ROC	8,287	8,380	8,472	8,472	33,611
NOx	33,363	33,727	34,091	34,091	135,272
SOx	1,860	1,881	1,901	1,901	7,543
PM10	17,220	17,411	17,603	17,603	69,837

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns				
	Combined Emissions from: Gas Turbine 1A, 1B and 1C Duct Burner 1A and 1B Auxiliary Boiler Cooling Tower				
	Quarter 1 lb/quarter	Quarter 2 lb/quarter	Quarter 3 lb/quarter	Quarter 4 lb/quarter	Total lb/year
CO	44,324	44,811	45,298	45,298	179,731

4D. **After all three gas turbine upgrades**, emissions from the following equipment at the facility shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions does not exclude gas turbine and auxiliary boiler start-ups and shutdowns				
	Combined Emissions from: Gas Turbine 1A, 1B and 1C Duct Burner 1A and 1B Auxiliary Boiler Cooling Tower				
	Quarter 1 lb/quarter	Quarter 2 lb/quarter	Quarter 3 lb/quarter	Quarter 4 lb/quarter	Total lb/year
ROC	8,287	8,380	8,472	8,472	33,611
NOx	28,993	29,305	29,618	29,618	117,534
SOx	1,901	1,923	1,944	1,944	7,712
PM10	17,220	17,411	17,603	17,603	69,837
CO	48,994	49,535	50,075	50,075	198,679

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

5. Emissions of HAPs from the facility shall not exceed the following limits:

Equipment	Maximum Allowable HAP Emissions (A) tons/year	
	Single HAP	Combination of HAPs
Total facility	9.9	24.9

(A) The purpose of this limitation is to qualify the gas turbines for the non-applicability of 40 CFR 63 Subpart YYYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines.

EQUIPMENT OPERATION REQUIREMENTS

6. Gas turbines 1A, 1B and 1C and duct burners 1A and 1B shall only combust natural gas fuel.
[SMAQMD Rule Nos. 201 and 202]
7. Duct burners 1A and 1B shall not be operated unless the associated combined cycle gas turbine 1A or 1B is operating.
[SMAQMD Rule Nos. 201 and 202]
8. Gas turbines 1A and 1B and/or the duct burners 1A and 1B shall not be operated without a fully functioning selective catalytic reduction air pollution control system and oxidizing catalyst air pollution control system, excluding periods of start-ups (as defined in Condition No. B.10).
[SMAQMD Rule Nos. 201 and 202]
9. Gas turbine 1C shall not be operated without a fully functioning selective catalytic reduction air pollution control system and oxidizing catalyst air pollution control system, excluding periods of start-ups (as defined in Condition No. B.11).
[SMAQMD Rule Nos. 201 and 202]
10. The start-up period of gas turbine 1A and 1B shall not exceed 60 minutes.
- A. **Prior to the gas turbine upgrade**, the start-up period is defined as the time when the fuel is first introduced to the turbine to the time when the emissions of NOx are controlled to 5 ppmvd at 15% O2 or less.

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

- B. **After the gas turbine upgrade**, the start-up period is defined as the time when the fuel is first introduced to the turbine to the time when the emissions of NO_x are controlled to 2.5 ppmvd at 15% O₂ or less.

[SMAQMD Rule Nos. 201 and 202]

11. The start-up period of gas turbine 1C shall not exceed 30 minutes.

- A. **Prior to the gas turbine upgrade**, the start-up period is defined as the time when the fuel is first introduced to the turbine to the time when the emissions of NO_x are controlled to 5 ppmvd at 15% O₂ or less.

- B. **After the gas turbine upgrade**, the start-up period is defined as the time when the fuel is first introduced to the turbine to the time when the emissions of NO_x are controlled to 2.5 ppmvd at 15% O₂ or less.

[SMAQMD Rule Nos. 201 and 202]

MONITORING REQUIREMENTS

12. The permittee shall operate a continuous emission monitoring system that has been approved by the SMAQMD Air Pollution Control Officer for gas turbines 1A, 1B and 1C and duct burners 1A and 1B.

[SMAQMD Rule Nos. 201 and 202]

- A. The continuous emission monitoring (CEM) system shall monitor and record nitrogen oxides, carbon monoxide and oxygen.
- B. For NO_x and O₂, the CEM system shall comply with U.S. EPA Performance Specifications in 40 CFR 75 Appendix A.
- C. For CO, the CEM system shall comply with U.S. EPA Performance Specifications in 40 CFR 60 Appendix B Performance Specification 4.

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NO_x SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

13. The permittee shall operate a continuous parameter monitoring system that has been approved by the SMAQMD Air Pollution Control Officer that either measures or calculates and records the following:

[SMAQMD Rule Nos. 201 and 202]

Parameter to be Monitored	Units
A. Individual fuel consumption of gas turbines 1A, 1B and 1C.	MMBTU/hour of natural gas
B. Individual fuel consumption of duct burners 1A and 1B.	MMBTU/hour of natural gas
C. Individual exhaust gas flow rate of: i. gas turbine 1A and duct burner 1A ii. gas turbine 1B and duct burner 1B iii. gas turbine 1C	kscfh or lb/hr

RECORDKEEPING AND REPORTING REQUIREMENTS

14. The following records shall be continuously maintained on site for the most recent five-year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly records as specified in the table below shall be made available for inspection within 30 days of the end of the quarter.

[SMAQMD Rule Nos. 201 and 202 and 40 CFR 60.7]

Frequency	Information to be Recorded
Upon occurrence	A. Record of the occurrence and duration of any start-up or shutdown. B. Malfunction in operation of gas turbines 1A, 1B or 1C. C. Measurements from the continuous emission and parameter monitoring systems. D. Monitoring device and performance testing measurements. E. All continuous monitoring system performance evaluations.

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

Frequency	Information to be Recorded
	<p>F. All continuous monitoring system or monitoring device calibration checks.</p> <p>G. All continuous monitoring system adjustments and maintenance.</p>
Hourly	<p>H. Natural gas fuel consumption of each of the gas turbines 1A, 1B and 1C (MMBTU/hour).</p> <p>I. Natural gas fuel consumption of each of the duct burners 1A and 1B (MMBTU/hour).</p> <p>J. Indicate when the startup for each gas turbine 1A, 1B and 1C occurred.</p> <p>K. i. ROC, NOx, SOx, PM10 and CO hourly emissions (lb/hour) from: a. gas turbine 1A and duct burner 1A b. gas turbine 1B and duct burner 1B c. gas turbine 1C</p> <p> ii. For those pollutants directly monitored (NOx and CO), the hourly emissions will be from the CEM system required pursuant to Condition No. B.12.</p> <p> iii. For those pollutants that are not directly monitored (ROC, SOx and PM10), the hourly emissions shall be calculated based on SMAQMD approved emission factors contained in the footnotes to Condition No. B.2.</p> <p>L. NOx emission concentration (ppmvd at 15% O2) from: i. gas turbine 1A and duct burner 1A ii. gas turbine 1B and duct burner 1B iii. gas turbine 1C</p>

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

Frequency	Information to be Recorded
Daily	M. ROC, NOx, SOx, PM10 and CO daily mass emissions (lb/day) individually from: <ul style="list-style-type: none"> i. gas turbine 1A and duct burner 1A ii. gas turbine 1B and duct burner 1B iii. gas turbine 1C iv. auxiliary boiler v. cooling tower
Quarterly	N. ROC, NOx, SOx, PM10 and CO quarterly mass emissions (lb/quarter) from all equipment combined at the facility: <ul style="list-style-type: none"> i. gas turbine 1A and duct burner 1A ii. gas turbine 1B and duct burner 1B iii. gas turbine 1C iv. auxiliary boiler v. cooling tower

15. Submit to the SMAQMD Air Pollution Control Officer a written report which contains the following information.

[SMAQMD Rule Nos. 201 and 202 and 40 CFR 60.7]

Frequency	Information to be Reported
Upon occurrence	A. A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)] B. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date. [40 CFR 60.7(a)(3)]

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

Frequency	Information to be Reported
Quarterly Submitted by: Jan 30 Apr 30 Jul 30 Oct 30 for the previous calendar quarter	<p>C. Whenever the continuous emissions monitoring system is inoperative except for zero and span checks:</p> <ul style="list-style-type: none"> i. Date and time of non-operation of the continuous emission monitoring system. ii. Nature of the continuous emission monitoring system repairs or adjustments. <p>D. Whenever an emission occurs as measured by the required continuous emissions monitoring system that is in excess of any emission limitation:</p> <ul style="list-style-type: none"> i. Magnitude of the emission which has been determined to be in excess. ii. Date and time of the commencement and completion of each period of excess emissions. iii. Periods of excess emissions due to startup, shutdown and malfunction shall be specifically identified. iv. The nature and cause of any malfunction (if known). v. The corrective action taken or preventive measures adopted. <p>E. If there are no excess emissions or the continuous monitoring system has not been inoperative, repaired or adjusted for a calendar quarter, a report shall be submitted stating such information.</p>

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

16. The permittee shall surrender (and has surrendered - See Condition Nos. 17, 18 and 19) ERCs to the SMAQMD Air Pollution Control Officer to offset the following amount of emissions:

[SMAQMD Rule 202]

Equipment - Gas Turbine 1A, 1B and 1C Duct Burners 1A and 1B Auxiliary Boiler Cooling Tower	Amount of Emission Offsets for which ERCs are to be Surrendered lb/quarter			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4
ROC	787	880	972	972
NOx	49,051	49,590	50,128	50,128
PM10	17,220	17,411	17,603	17,603

17. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the ROC emission offset requirements as stated in Condition No. 16:

[SMAQMD Rule 202]

ERC Certificate No.	Face Value of Emission Reduction Credit Certificates lb/quarter				IPTR (A)	Offset Ratio	Value Applied to ROC Emission Liability lb/quarter			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4			Qtr 1	Qtr 2	Qtr 3	Qtr 4
PCAPCD 2000-02 Formica (ROC)	1,181	1,320	1,458	1,458	NA	1.5	787	880	972	972
Total ROC Emission Offsets							787	880	972	972

(A) IPTR = interpollutant trading ratio

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

18. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the NOx emission offset requirements as stated in Condition No. 16:
[SMAQMD Rule 202]

ERC Certificate No.	Face Value of Emission Reduction Credit Certificates lb/quarter				IPTR (A)	Offset Ratio	Value Applied to NOx Emission Liability lb/quarter			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4			Qtr 1	Qtr 2	Qtr 3	Qtr 4
SMAQMD 00260 Grace NOx	9359	9375	9414	9428	NA	1.2	7799	7813	7845	7857
SMAQMD 00387 Grace NOx	3409	3443	3404	3401	NA	1.2	2841	2869	2837	2834
SMAQMD 00389 Grace NOx	7313	6353	6724	6931	NA	1.2	6094	5294	5603	5776
Unocal (NOx)	41616	41616	41616	41616	NA	2	20808	20808	20808	20808
PCAPCD 2000-02 Formica (ROC)	36177	41251	42058	41331	2:1	2	9044	10313	10515	10333
SMAQMD 00734 Campbell Soup (NOx)	640	516	4417	0	NA	1.2	533	430	3681	0

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

ERC Certificate No.	Face Value of Emission Reduction Credit Certificates lb/quarter				IPTR (A)	Offset Ratio	Value Applied to NOx Emission Liability lb/quarter			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4			Qtr 1	Qtr 2	Qtr 3	Qtr 4
SMAQMD 00735 Campbell Soup (NOx)	2318	2476	0	1633	NA	1.2	1932	2063	0	1361
Subtotal NOx							49051	49590	51288	48969
Move 1159 lb of surplus ERCs from Qtr 3 to Qtr 4 (B)									-1159	+1159
Total NOx Emission Offsets							49051	49590	50128	50128

(A) IPTR = interpollutant trading ratio

(B) SMAQMD Rule 202 allows ROC and NOx ERCs created in calendar quarters 2 and 3 to be used as offsets in any calendar quarters.

19. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the PM10 emission offset requirements as stated in Condition No. 16:

[SMAQMD Rule 202]

Offset Source	Face Value of Emission Reduction credit Certificates lb/quarter				IPTR (A)	Offset Ratio	Value Applied to PM10 Emission Liability lb/quarter			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4			Qtr 1	Qtr 2	Qtr 3	Qtr 4
PCAPCD 95-00006 2000-03 Sierra Pine (PM10)	32,775	33,139	33,503	33,503	NA	2	16,387	16,569	16,751	16,751

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

PCAPCD 97-00001 Sierra Pine (PM10)	1,250	1,263	1,278	1,278	NA	1.5	833	842	852	852
Total PM10 Emission Offsets							17,220	17,411	17,603	17,603

(A) IPTR = interpollutant trading ratio

EMISSION TESTING REQUIREMENTS

20. The permittee shall perform an ROC, NOx, PM10 and CO source test and CEM accuracy (RATA) test of gas turbine 1A, 1B and 1C and duct burner 1A and 1B once each calendar year (**after the gas turbine upgrade** - and no more than 14 calendar months following the previous source test).
- A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed. The source test plan shall indicate that U.S. EPA approved test methods are used for NOx and CO.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the emission testing date.
 - C. During the test(s), each gas turbine and duct burner shall be operated at its maximum firing capacity, defined as $\geq 90\%$ of rated heat input capacity and taking into account ambient conditions.
 - D. Each gas turbine 1A, 1B and 1C shall also be tested at partial load (50%) for ROC and CO.
 - E. Submit the source test results to the SMAQMD Air Pollution Control Officer within 60 days after the completion of the source test(s).
 - F. The SMAQMD Air Pollution Control Officer may waive the ROC and PM10 annual source test requirement every other year if the prior annual source test result indicates that the respective hourly emissions are less than or equal to 75% of the respective hourly emission limit.

[SMAQMD Rules 201 and 202]

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 GAS TURBINES 1A, 1B AND 1C
 DUCT BURNERS 1A AND 1B
 APC NOx SCR SYSTEMS 1A, 1B AND 1C
 APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

PERMIT SHIELD

21. Compliance with the specified conditions of the Title V permit shall be deemed compliance with the following subsumed requirements.

[U.S. EPA Title V White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program]

Title V Permit Condition No.	Subsumed requirement
2.A, 2.B	SMAQMD Rule 406 - Combustion Contaminants (adopted 12-06-1978)
1.A, 1.B, 2.A, 2.B, 10, 11, 14, 15	SMAQMD Rule 413 - Stationary Gas Turbines (adopted 03-24-2005)
2.A, 2.B, 6	SMAQMD Rule 420 - Sulfur Content of Fuels (adopted 08-13-1981)
14, 15	Applicable to duct burners 1A and 1B only - 40 CFR 60 Subpart Dc - NSPS for Small Industrial - Commercial - Institutional Steam Generating Units (amended 06-13-2007) (prior to the physical upgrade of the gas turbine)
1.A, 1.B, 2.A, 2.B, 14, 15	(prior to the physical upgrade of the gas turbine) Applicable to gas turbines 1A, 1B and 1C only - 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines (amended 02-24-2006)
1.A, 1.B, 2.A, 2.B, 14, 15	(after the physical upgrade of the gas turbine) 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (amended 07-06-2006)

22. The installation of an identical substitute engine core to either Gas Turbine 1A, 1B or 1C for routine maintenance and repair of its original engine core shall not constitute a modification pursuant to SMAQMD Rule 202 Section 222 provided:

- A. The operation of the temporary substitute engine core shall not involve upgrades or changes to heat input, production rate, method of operation, exhaust gas emissions or emissions control technology.

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

B. All of the original emission control systems, heat recovery equipment, fuel supply system, lubrication systems, certified CEMS/DAHS and other auxiliary equipment associated with the gas turbine shall remain in place.

[SMAQMD Rule 202 Section 222 and SMAQMD Rule 207 Section 307.1]

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
The requirements specified under this section are enforceable by the SMAQMD only.

COMMISSIONING PERIOD REQUIREMENTS

- CM9. Within 60 days of completion of each turbine's upgrade, the permittee shall perform an ammonia source test. A successful completion of this initial startup ammonia source test can qualify as an annual ammonia compliance test as required by Condition No. C.24.
- A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the emission testing date.
 - C. During the test(s), each gas turbine and duct burner shall be operated at its maximum firing capacity, defined as $\geq 90\%$ of rated heat input capacity and taking into account ambient conditions.
 - D. Submit the source test results to the SMAQMD Air Pollution Control Officer within 60 days after the completion of the source test(s).

[SMAQMD Rules 201 and 202]

EMISSION LIMITATION REQUIREMENTS

23. Emissions from gas turbines 1A, 1B and 1C shall not exceed the following emissions limit, **excluding** periods containing startups or shutdowns (as defined in Condition Nos. B.8 and B.9).

[SMAQMD Rule 402]

Pollutant	Maximum Allowable Emissions ppmv measured as NH ₃ any consecutive 3 hour average
Ammonia (NH ₃)	10

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

EMISSION TESTING REQUIREMENTS

24. The permittee shall perform a NH₃ source test of gas turbines 1A, 1B and 1C once each calendar year.
- A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the emission testing date.
 - C. During the test(s), each gas turbine is to be operated at its maximum firing capacity, which is defined as $\geq 90\%$ of rated heat input capacity and taking into account ambient conditions.
 - D. Submit the source test results to the SMAQMD Air Pollution Control Officer within 60 days after the completion of the source test(s).

[SMAQMD Rule 201]

**FEDERALLY ENFORCEABLE REQUIREMENTS - TITLE IV ACID RAIN PERMIT
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

D. ACID RAIN PERMIT

The requirements specified under this subsection are issued in accordance with SMAQMD Rule 207 - Title V Federal Operating Permit Program, SMAQMD Rule 208 - Acid Rain and Title IV and Title V of the federal Clean Air Act, and are enforceable by the SMAQMD, the U.S. EPA and the public.

PERMIT REQUIREMENTS

25. The designated representative of each affected source and each affected unit at the source shall:

- A. Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR Part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
- B. Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit.

[40 CFR 72.9(a)(1)]

26. The owners and operators of each affected source and each affected unit at the source shall:

- A. Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
- B. Have an Acid Rain Permit.

[40 CFR 72.9(a)(2)]

MONITORING REQUIREMENTS

27. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source, shall comply with the monitoring requirements as provided in 40 CFR Parts 74, 75 and 76.

- A. Sampling and analysis for fuel gas total sulfur content shall comply with the requirements of 40 CFR Part 75 Appendix D.
 - i. Sampling for fuel gas total sulfur content is not required if a valid contract or tariff sheet is used to qualify the gas as pipeline natural gas, as defined in 40 CFR 72.2.
 - ii. If fuel gas sampling is used to qualify the fuel gas as pipeline natural gas, a sample shall be collected and analyzed:

**FEDERALLY ENFORCEABLE REQUIREMENTS - TITLE IV ACID RAIN PERMIT
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

- a. at least once annually for fuel gas total sulfur content, and
 - b. whenever the fuel gas supply source changes.
 - iii. Provided that the analysis results do not exceed 0.5 grains total sulfur per 100 scf of fuel gas, the default emission rate of 0.0006 lb SO₂/MMBTU shall be used to determine SO₂ mass emissions for the purposes of the Acid Rain Program.
 - iv. If the results of the fuel gas sampling show that the fuel gas does not meet the definition of pipeline natural gas in 40 CFR 72.2, but those results are believed to be anomalous, the owner or operator may document the reasons for believing this in the monitoring plan for the unit, and may immediately perform additional sampling in accordance with of 40 CFR 75 Appendix D Section 2.3.1.4(b). In such cases, a minimum of three additional samples must be obtained and analyzed, and the results of each sample analysis must meet the definition of pipeline natural gas.
 - v. If the results of the annual and additional samples show that the fuel gas does not meet the definition of pipeline quality gas, the owner or operator shall reclassify the fuel as appropriate and determine the SO₂ emission rate to be used in the Acid Rain Program calculations in accordance with the following:
 - (a) If the fuel still qualifies as natural gas under 40 CFR 75 Appendix D Section 2.3.2.4, reclassify the fuel as natural gas and determine the appropriate default SO₂ emission rate for the fuel, according to 40 CFR 75 Appendix D Section 2.3.2.1.1.
- [40 CFR 72.9(b)(1) and 40 CFR 75 Appendix D]**
28. The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
[40 CFR 72.9(b)(2)]
29. The requirements of 40 CFR Parts 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the federal Clean Air Act and other provisions of the operating permit for the source.
[40 CFR 72.9(b)(3)]

SULFUR DIOXIDE REQUIREMENTS

30. The owners and operators of each source and each affected unit at the source shall:

**FEDERALLY ENFORCEABLE REQUIREMENTS - TITLE IV ACID RAIN PERMIT
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

- A. Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
- B. Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
[40 CFR 72.9(c)(1)]
- 31 Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the federal Clean Air Act.
[40 CFR 72.9(c)(2)]
32. An affected unit shall be subject to the requirements under 40 CFR 72.9(c)(1) as follows:
- A. Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
- B. Starting on or after January 1, 1995 in accordance with 40 CFR 72.41 and 72.43, an affected unit under 40 CFR 72.6(a)(2) or (3) that is a substitution or compensating unit;
- C. Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2) that is not a substitution or compensating unit; or
- D. Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit.
[40 CFR 72.9(c)(3)]
33. Allowances shall be held in, deducted from or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
[40 CFR 72.9(c)(4)]
34. An allowance shall not be deducted in order to comply with the requirements of 40 CFR 72.9(c)(1)(i) prior to the calendar year for which the allowance was allocated.
[40 CFR 72.9(c)(5)]
35. An allowance allocated by the U.S. EPA Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
[40 CFR 72.9(c)(6)]

**FEDERALLY ENFORCEABLE REQUIREMENTS - TITLE IV ACID RAIN PERMIT
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

36. An allowance allocated by the U.S. EPA Administrator under the Acid Rain Program does not constitute a property right.

[40 CFR 72.9(c)(7)]

NITROGEN OXIDES REQUIREMENTS

37. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

EXCESS EMISSIONS REQUIREMENTS

38. The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

[40 CFR 72.9(e)(1)]

39. The owners and operators of an affected source that has excess emissions in any calendar year shall:

A. Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and

B. Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

[40 CFR 72.9(e)(2)]

RECORDKEEPING AND REPORTING REQUIREMENTS

40. Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the U.S. EPA Administrator or permitting authority:

A. The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.

B. All emissions monitoring information, in accordance with 40 CFR Part 75 provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

**FEDERALLY ENFORCEABLE REQUIREMENTS - TITLE IV ACID RAIN PERMIT
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

- C. Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program.
- D. Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- E. The date that any fuel gas supply source change occurs.
(this requirement is not part of 40 CFR 72.9(f)(1))
- F. The date when the fuel type changes between pipeline natural gas and natural gas as described in Condition No. 27.
(this requirement is not part of 40 CFR 72.9(f)(1))

[40 CFR 72.9(f)(1)]

- 41. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72 Subpart I and 40 CFR Part 75.

[40 CFR 72.9(f)(2)]

LIABILITY REQUIREMENTS

- 42. Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to Section 113(c) of the federal Clean Air Act.

[40 CFR 72.9(g)(1)]

- 43. Any person who knowingly makes a false material statement in any record, submission or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the federal Clean Air Act and 18 U.S.C. 1001.

[40 CFR 72.9(g)(2)]

- 44. No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

[40 CFR 72.9(g)(3)]

- 45. Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

[40 CFR 72.9(g)(4)]

**FEDERALLY ENFORCEABLE REQUIREMENTS - TITLE IV ACID RAIN PERMIT
GAS TURBINES 1A, 1B AND 1C
DUCT BURNERS 1A AND 1B
APC NO_x SCR SYSTEMS 1A, 1B AND 1C
APC ROC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C**

46. Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

[40 CFR 72.9(g)(5)]

47. Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.

[40 CFR 72.9(g)(6)]

48. Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77 and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the federal Clean Air Act.

[40 CFR 72.9(g)(7)]

EFFECT ON OTHER AUTHORITIES

49. No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

A. Except as expressly provided in Title IV of the federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the federal Clean Air Act, including the provisions of Title I of the federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans.

B. Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the federal Clean Air Act.

C. Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law.

D. Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act.

E. Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

[40 CFR 72.9(h)]

**FEDERALLY ENFORCEABLE REQUIREMENTS
 AUXILIARY BOILER**

A. EQUIPMENT DESCRIPTION

The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

AUXILIARY BOILER

P/O No. 12318(Rev03) (permit number is for reference purposes only - not federally enforceable)

Manufacturer: Babcock and Wilcox
 Model No.: FM101-88
 Burner Type: Todd Ultra Low NOx Rapid Mix Burner System
 Heat Input: 108.7 MMBTU/hour
 Fuel: Natural gas

B. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC

The requirements specified under this subsection are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSION LIMITATION REQUIREMENTS

- The auxiliary boiler emissions shall not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions any consecutive 3 hour average	
	ppmvd at 3% O2 excluding periods of startups and shutdowns (A)	lb/hour including periods of startups and shutdowns (A)
ROC	-	0.41 (B)
NOx	9	1.15 (C)
SOx	-	0.08 (D)
PM10	-	0.54 (E)
CO	400	7.12 (F)

(A) The start-up period is defined as the time period, not to exceed two hours, when fuel is first introduced to the auxiliary boiler to the time when the emissions of NOx are controlled to 9 ppmvd at 3% O2 or less.

The shutdown period is defined as the time period, not to exceed two hours, in which the auxiliary boiler is cooled from its normal operating temperature.

(B) ROC emission based on an ROC emission factor of 0.00377 lb/MMBTU and firing at full capacity.

FEDERALLY ENFORCEABLE REQUIREMENTS AUXILIARY BOILER

- (C) NO_x emission based on NO_x data submitted in the permit application and monitoring data from the boiler's NO_x CEM system.
 - (D) SO_x emission based on a SO_x emission factor of 0.0006 lb/MMBTU and firing at full capacity.
 - (E) PM₁₀ emission based on a PM₁₀ emission factor of 0.00497 lb/MMBTU and firing at full capacity.
 - (F) CO emission based on CO data submitted in the permit application and monitoring data from the boiler's CO CEM system.
2. Emissions from the following equipment at the facility shall not exceed the following daily emission limits:
[SMAQMD Rule Nos. 201 and 202]

See Condition Nos. 3.A and 3.B for the Gas Turbines

- 3 Emissions from the following equipment at the facility shall not exceed the following quarterly emission limits:
[SMAQMD Rule Nos. 201 and 202]

See Condition Nos. 4.A, 4.B, 4.C and 4.D for the Gas Turbines

EQUIPMENT OPERATION AND MONITORING REQUIREMENTS

4. The auxiliary boiler shall not exceed an annual capacity factor of 80% based on heat input.
[SMAQMD Rule Nos. 201 and 202]
5. The auxiliary boiler shall only combust natural gas fuel.
[SMAQMD Rule Nos. 201 and 202]
6. The permittee shall operate a continuous emission monitoring system that has been approved by the SMAQMD Air Pollution Control Officer for the auxiliary boiler emissions.
- A. The continuous emission monitoring (CEM) system shall monitor and record NO_x, CO and O₂.
 - B. The CEM system shall comply with the U.S. EPA performance specifications (40 CFR 60 Appendix B, Performance Specifications 2, 3 and 4).
[SMAQMD Rule Nos. 201 and 202]

**FEDERALLY ENFORCEABLE REQUIREMENTS
 AUXILIARY BOILER**

7. The permittee shall operate a continuous parameter monitoring system that has been approved by the SMAQMD Air Pollution Control Officer that either measures or calculates and records the following:

[SMAQMD Rule Nos. 201 and 202]

Parameter to be Monitored	Units
Fuel consumption of the auxiliary boiler	MMBTU/hour of natural gas

RECORDKEEPING AND REPORTING REQUIREMENTS

8. The following records shall be continuously maintained on site for the most recent five-year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records as specified in the table below shall be made available for inspection within 30 days of the end of the reporting period.

[SMAQMD Rule Nos. 201 and 202]

Frequency	Information to be Recorded
Upon occurrence	A. Record of the occurrence and duration of any start-up or shutdown. B. Malfunction in operation of gas turbines 1A, 1B or 1C. C. Measurements from the continuous emission and parameter monitoring systems. D. Monitoring device and performance testing measurements. E. All continuous monitoring system performance evaluations. F. All continuous monitoring system or monitoring device calibration checks. G. All continuous monitoring system adjustments and maintenance.

**FEDERALLY ENFORCEABLE REQUIREMENTS
 AUXILIARY BOILER**

Frequency	Information to be Recorded
Hourly	<p>H. Auxiliary boiler natural gas fuel consumption (MMBTU/hour).</p> <p>I. Auxiliary boiler ROC, NOx, SOx, PM10 and CO hourly emissions. (lb/hour)</p> <p style="margin-left: 40px;">i. For those pollutants directly monitored (NOx and CO), the hourly emissions shall be calculated based on the CEM system required pursuant to Condition No. B(6).</p> <p style="margin-left: 40px;">ii. For those pollutant that are not directly monitored (ROC, SOx and PM10), the hourly emissions shall be calculated based on an emission factor derived from the maximum hourly permitted emission rate divided by the maximum heat input capacity and then multiplied by the actual firing rate of the auxiliary boiler.</p> <p>J. Auxiliary boiler NOx concentration. (ppmvd at 3% O2)</p>
Daily	K. Total combined facility ROC, NOx, SOx, PM10 and CO daily mass emissions. (lb/day)
Quarterly	L. Total combined facility ROC, NOx, SOx, PM10 and CO quarterly mass emissions. (lb/quarter)
Yearly	M. Annual capacity factor based on heat input. (%)

9. Submit to the SMAQMD Air Pollution Control Officer a written report which contains the following information.

[SMAQMD Rule Nos. 201 and 202 and 40 CFR 60.7]

Frequency	Information to be Reported
Quarterly Submitted by: Jan 30 Apr 30 Jul 30 Oct 30 for the previous calendar	<p>A. Whenever the CEM system is inoperative except for zero and span checks:</p> <p style="margin-left: 40px;">i. Date and time of non-operation of the continuous emission monitoring system.</p> <p style="margin-left: 40px;">ii. Nature of the continuous emission monitoring system repairs or adjustments.</p> <p>B. Whenever an emission occurs as measured by the required continuous emissions monitoring system that is in excess of any emission limitation:</p>

FEDERALLY ENFORCEABLE REQUIREMENTS AUXILIARY BOILER

Frequency	Information to be Reported
quarter	<ul style="list-style-type: none">i. Magnitude of the emission which has been determined to be in excess.ii. Date and time of the commencement and completion of each period of excess emissions.iii. Periods of excess emissions due to startup, shutdown and malfunction shall be specifically identified.iv. The nature and cause of any malfunction (if known).v. The corrective action taken or preventive measures adopted. <p>C. If there were no excess emissions for a calendar quarter:</p> <ul style="list-style-type: none">i. A report shall be submitted indicating that there were no excess emissions.

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

10. The permittee shall surrender (and has surrendered - See Condition Nos. 11, 12 and 13) ERCs to the SMAQMD Air Pollution Control Officer to offset the following amount of emissions:

[SMAQMD Rule 202]

See Condition No. 16 for the Gas Turbines

11. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the ROC emission offset requirements as stated in Condition No. 11:

[SMAQMD Rule 202]

See Condition No. 17 for the Gas Turbines

12. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the NOx emission offset requirements as stated in Condition No. 11:

[SMAQMD Rule 202]

See Condition No. 18 for the Gas Turbines

13. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the PM10 emission offset requirements as stated in Condition No. 11:

[SMAQMD Rule 202]

See Condition No. 19 for the Gas Turbines

FEDERALLY ENFORCEABLE REQUIREMENTS AUXILIARY BOILER

EMISSION TESTING REQUIREMENTS

14. An ROC, NO_x, CO and CEM accuracy source test of the auxiliary boiler shall be performed once every calendar year. The SMAQMD Air Pollution Control Officer may waive the annual ROC source test requirement if, in the SMAQMD Air Pollution Control Officer's sole judgment, prior test results indicate an adequate compliance margin has been maintained.
- A. Submit a source test plan to the SMAQMD Air Pollution Control Officer for approval at least 30 days before the source test is to be performed. The source test plan shall indicate that U.S. EPA approved test methods are used for NO_x and CO.
 - B. Notify the SMAQMD Air Pollution Control Officer at least 7 days prior to the emission testing date.
 - C. During the test(s), the auxiliary boiler shall be operated at > 90% of its maximum firing capacity.
 - D. Submit the source test results to the SMAQMD Air Pollution Control Officer within 60 days after the completion of the source test(s).
 - E. The SMAQMD Air Pollution Control Officer may waive the annual ROC source test requirement every other year if the prior annual source test result indicates that the ROC hourly emissions are less than or equal to 75% of the hourly ROC emission limit.

[SMAQMD Rule 201]

PERMIT SHIELD

15. Compliance with the specified conditions of the Title V permit shall be deemed compliance with the following subsumed requirements.

[U.S. EPA Title V White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program]

Title V Permit Condition No.	Subsumed requirement
1	SMAQMD Rule 406 - Combustion Contaminants (adopted 12-06-1978)
1, 8	SMAQMD Rule 411 - Boiler NO _x (adopted 10-27-2005)
1, 5	SMAQMD Rule 420 - Sulfur Content of Fuels (adopted 08-13-1981)
1, 8, 9	40 CFR 60 Subpart Db - Standards of Performance for Industrial - Commercial - Institutional Steam Generating Units

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC COOLING TOWER

A. EQUIPMENT DESCRIPTION

The information specified under this section is enforceable by the SMAQMD, U.S. EPA and the public.

The requirements specified under the following sections apply to the following equipment:

COOLING TOWER

P/O No. 11431 (permit number is for reference purposes only - not federally enforceable)
Manufacturer: Hamon Cooling Towers
Type: Mechanical draft, counterflow, with drift eliminator
Size: 3 cell
Capacity: 48,850 gallons/minute

B. APPLICABLE FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC

The requirements specified under this subsection are enforceable by the SMAQMD, U.S. EPA and the public.

EMISSION LIMITATION REQUIREMENTS

1. Emissions from the cooling tower shall not exceed the following:
[SMAQMD Rule 202]

Pollutant	Maximum Allowable Emissions Cooling Tower lb/hour, any consecutive 3 hour average
PM10	0.29 (A)

(A) Based on a water circulation rate of 48,850 gal/min, cooling tower drift rate of 0.0006%, and a TDS level of 2000 ppmw.

2. Emissions from the following equipment at the facility shall not exceed the following daily emission limits:

[SMAQMD Rule Nos. 201 and 202]

See Condition Nos. 3.A and 3.B for the Gas Turbines

3. Emissions from the following equipment at the facility shall not exceed the following quarterly emission limits:

[SMAQMD Rule Nos. 201 and 202]

See Condition Nos. 4.A, 4.B, 4.C and 4.E for the Gas Turbines

**FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
 COOLING TOWER**

4. The total dissolved solids content of the circulating cooling water shall not exceed 2000 ppmw, averaged over any consecutive three-hour period.
[SMAQMD Rule No. 201]

EQUIPMENT OPERATION REQUIREMENTS

None

MONITORING REQUIREMENTS

5. The permittee shall operate a continuous parameter monitoring system, that has been approved by the SMAQMD Air Pollution Control Officer, that either measures or calculates and records the following.
[SMAQMD Rule 201 and 202]

Parameter to be Monitored	Units
A. Total dissolved solids content of the circulating water in the cooling tower	ppmw

RECORDKEEPING AND REPORTING REQUIREMENTS

6. The following records shall be continuously maintained on site for the most recent five-year period and shall be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly records shall be made available for inspection within 30 days of the end of the reporting period.
[SMAQMD Rule 201 and 202]

Frequency	Information to be Recorded
Hourly	A. Total dissolved solids content of the circulating water in the cooling tower. (ppmw) B. Cooling tower hourly PM10 mass emission rate. (lb PM10/hour) i. The hourly emissions shall be calculated based on the cooling water circulation rate multiplied by the cooling tower drift rate, density of water and the measured TDS level.
Daily	C. Cooling tower PM10 daily mass emissions. (lb/day) D. Total facility PM10 daily mass emissions. (lb/day)
Quarterly	E. Total facility PM10 quarterly mass emissions. (lb/quarter)

FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC COOLING TOWER

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

7. The permittee shall surrender (and has surrendered - See Condition No. 8) PM10 ERCs to the SMAQMD Air Pollution Control Officer to offset the following amount of PM10 emissions:
[SMAQMD Rule 202]

See Condition No. 16 for the Gas Turbines (PM10 only)

8. The following PM10 ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the PM10 emission offset requirements as stated in Condition No. 7:
[SMAQMD Rule 202]

See Condition No. 19 for the Gas Turbines

PERMIT SHIELD

9. Compliance with the specified conditions of the Title V permit shall be deemed compliance with the following subsumed requirements.
[U.S. EPA Title V White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program]

Title V Permit Condition No.	Subsumed requirement
1	SMAQMD Rule 404 - Particulate Matter (adopted 11-20-1984)

NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC
COOLING TOWER

C. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC

The requirements specified under this section are enforceable by the SMAQMD only.

10. The cooling tower shall not use any chromium containing water treatment chemicals.
**[State of California Air Toxic Control Measure for Chromate Treated Cooling Towers
(CCR 93103)]**

INSIGNIFICANT EMISSIONS UNITS

The following systems are considered insignificant emissions units and are not subject to equipment specific requirements. However, these units are required to comply with all applicable general requirements.

Equipment Description	Basis for the Exemption
Vehicles	SMAQMD Rule 201 Section 111.1 Vehicles used to transport passengers or freight.
Portable water sprayer, 13.5 hp Portable welder, 16 hp	SMAQMD Rule 201 Section 112.1 Internal combustion engines with a manufacturer's maximum continuous rating of 50 hp or less.
Water heaters 30,000 BTU/hour 199,000 BTU/hour	SMAQMD Rule 201 Section 112.2 Combustion equipment with a heat input < 1 MMBTU/hour
Air conditioners	SMAQMD Rule 201 Section 115 Air conditioning systems not designed to remove air contaminants.
Anhydrous ammonia storage tank Compressed gas cylinders (e.g. CO ₂ , H ₂ , calibration gases)	SMAQMD Rule 201 Section 117.1 Tanks used for the storage of liquefied or compressed gases.
Lube oil storage tanks Waste lube oil storage tanks Hydraulic oil storage tanks Water/waste oil separator Pipeline liquids storage tanks	SMAQMD Rule 201 Section 117.2 Tanks used for the storage of unheated organic materials with a vapor pressure ≤ 5 mm Hg (0.1 psia) or initial boiling point ≥ 150 °C (302 °F).
Maintenance shop painting	SMAQMD Rule 201 Section 118 Surface coating operations using a combined total of one gallon per day or less of coating material or solvent.

INSIGNIFICANT EMISSIONS UNITS

Equipment Description	Basis for the Exemption
Parts washer Natural gas compressor (electric drive) Abrasive blasting cabinet Fugitive emissions associated with plant piping systems for fuel gas, fuel oil, lube oil and anhydrous ammonia Water treatment chemical storage tanks	SMAQMD Rule 201 Section 122 Other equipment which would emit any pollutant, without the benefit of air pollution control devices, at a rate less than 2 pounds in any 24 hour period.

ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

Acronyms, abbreviations and units of measure used in this permit are defined as follows:

ASTM

American Society for Testing and Materials

BACT

Best Available Control Technology.

CAA

The federal Clean Air Act.

CARB

California Air Resources Board.

CFC

Chloro-fluoro-carbons. A class of compounds responsible for destroying ozone in the upper atmosphere.

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO

Carbon monoxide.

CO₂

Carbon dioxide.

ERC

Emission reduction credit.

Federally Enforceable

All limitations and conditions which are enforceable by the Administrator of the U.S. EPA including those requirements developed pursuant to 40 CFR Part 51, Subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (HAP) and Part 72 (Permits Regulation, Acid Rain) including limitations and conditions contained in operating permits issued under a U.S. EPA approved program that has been incorporated into the California SIP.

NESHAP

National Emission Standards for Hazardous Air Pollutants (see 40 CFR Parts 61 and 63).

NO_x

Nitrogen oxides.

ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

NSPS

New Source Performance Standards. U.S. EPA standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the federal Clean Air Act and implemented by 40 CFR Part 60 and SMAQMD Regulation 8.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and SMAQMD Rule 202. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O2

Oxygen.

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of ROC, NOx, SO2 and PM10.

PM

Particulate matter.

PM10

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns.

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the SMAQMD is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the federal Clean Air Act and implemented by 40 CFR Part 52.

ROC

Reactive organic compounds.

SIP

State Implementation Plan. CARB and SMAQMD programs and regulations approved by U.S. EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the federal Clean Air Act.

SMAQMD

Sacramento Metropolitan Air Quality Management District.

SO2

Sulfur dioxide.

ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

Title V

Title V of the federal Clean Air Act. Title V requires the SMAQMD to operate a federally enforceable operating permit program for major stationary sources and other specified sources.

TSP

Total suspended particulate.

U.S. EPA

The federal Environmental Protection Agency.

VOC

Volatile Organic Compounds.

UNITS OF MEASURE:

BTU	=	British Thermal Unit
cfm	=	cubic feet per minute
cm	=	centimeter
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inch
kg	=	kilogram
max	=	maximum
m ²	=	square meter
min	=	minute
mm	=	millimeter
MM	=	million
ppmv	=	parts per million by volume
ppmw	=	parts per million by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
quarter	=	calendar quarter
RVP	=	Reid vapor pressure
scfm	=	standard cubic feet per minute
yr	=	year