



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

**TITLE V PERMIT NO:
TV2012-12-01**

**PERMIT
ISSUED:**

11/30/2018

**PERMIT
LAST AMENDED:**

N/A

**PERMIT
EXPIRES:**

11/30/2023

(5 years from date of issuance)

PERMIT ISSUED TO:

Sacramento Cogeneration Authority
PO Box 15830, Mail Stop EA405
Sacramento, CA 95852-0830

FACILITY LOCATION:

Sacramento Cogeneration Authority
5000 83rd Street
Sacramento, CA

RESPONSIBLE OFFICIAL:

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(916) 379-2041

NATURE OF BUSINESS:
Municipal Electricity Generation

**STANDARD INDUSTRIAL
CLASSIFICATION (SIC):**
4931

Alberto Ayala
SMAQMD Air Pollution Control Officer

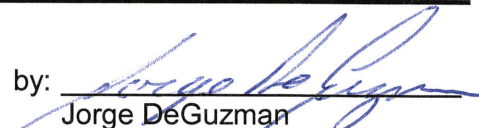
by: 
Jorge DeGuzman
Permitting Program Manager

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I. PERMIT SUMMARY

This permit serves 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 permit holder'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	10-27-2011	Yes
SMAQMD Rule 102	Circumvention	05-15-1972	Yes
SMAQMD Rule 105	Emission Statements	09-05-1996	Yes
SMAQMD Rule 201	General Permit Requirements (SIP approved)	11-20-1984	Yes
SMAQMD Rule 201	General Permit Requirements (Not SIP approved)	08-24-2006	No
SMAQMD Rule 202	New Source Review (Not SIP approved. SIP approval of 11-20-84 version was withdrawn on 08-19-2011.)	08-23-2012	No
SMAQMD Rule 203	Prevention of Significant Deterioration	01-27-2011	Yes
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)	07-28-2011	Yes
SMAQMD Rule 211	MACT at Major Sources of Hazardous Air Pollutants (Rule is not SIP approved but MACT requirements for boilers are applicable.)	01-22-1999	No
SMAQMD Rule 214	Federal New Source Review	08-23-2012	Yes

I. PERMIT SUMMARY

Citation	Description	Rule Adoption Date	Federally Enforceable ?
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)	07-25-2013	Yes (Title V provisions only)
SMAQMD Rule 306	Air Toxic Fees	05-23-2013	No
SMAQMD Rule 307	Clean Air Act Fees	09-26-2002	Yes
SMAQMD Rule 401	Ringelmann Chart	04-05-1983	Yes
SMAQMD Rule 402	Nuisance	08-03-1977	No
SMAQMD Rule 403	Fugitive Dust	08-03-1977	Yes
SMAQMD Rule 404	Particulate Matter	11-20-1984	Yes
SMAQMD Rule 406	Specific Contaminants	12-06-1978	Yes
SMAQMD Rule 411	NOx from Boilers, Process Heaters and Steam Generators	08-23-2007	Yes
SMAQMD Rule 413	Stationary Gas Turbines	03-24-2005	Yes
SMAQMD Rule 420	Sulfur Content of Fuels	08-13-1981	Yes
SMAQMD Rule 442	Architectural Coatings	09-24-2015	Yes
SMAQMD Rule 451	Surface Coating of Miscellaneous Metal Parts and Products	10-28-2010	Yes
SMAQMD Rule 466	Solvent Cleaning	10-28-2010	Yes
SMAQMD Rule 602	Breakdown Conditions: Emergency Variance	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]	03-09-1989 (A)	No
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)]	02-16-2012 (B)	Yes

I. PERMIT SUMMARY

Citation	Description	Rule Adoption Date	Federally Enforceable ?
U.S. EPA New Source Performance Standards (NSPS)	Standards of Performance for Stationary Combustion Turbines [40 CFR 60 Subpart KKKK (begin at 60.4300)]	03-20-2009 (B)	Yes
U.S. EPA Chemical Accident Prevention Provisions	Chemical Accident Prevention Provisions [40 CFR Part 68]	01/13/2016 (B)	Yes
U.S. EPA Acid Rain Program	Acid Rain Program [40 CFR 72-78 (begin at 72.1)]	10-19-2007 (B)	Yes
U.S. EPA Protection of Stratospheric Ozone	Protection of Stratospheric Ozone [40 CFR Part 82]	11/18/2016 (B)	

(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.

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
1st Administrative Modification	01-18-2012	TV2007-12-01A

Current Permitting Action

This 2nd permit renewal action will be assigned the permit number TV2012-12-01. This permit also reflects two subsequent administrative amendments (TV2012-12-01A & TV2012-12-01B) updating the responsible official and a third administrative amendment (TV2012-12-01C) incorporating the conditions on the new auxiliary boiler (Permit # 24398) and the selective catalytic reduction system (Permit #24399) that underwent enhanced new source review (finalized on July 31, 2015).

II. 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 cogeneration facility consists of two major power systems and support equipment.

Combined Cycle Power System:

1. (2) General Electric LM6000PC SPRINT/EFS gas turbines, 500 MMBTU/hour each, natural gas fuel, with a nominal rating of 50 MW each
2. (2) duct burners, 83.2 MMBTU/hour each, natural gas fuel.
3. (2) Heat recovery steam generators.
4. (1) 45 MW nominal capacity steam turbine generator.
5. (2) Selective catalytic reduction (SCR) NO_x air pollution control systems.
6. (2) Oxidation catalyst CO and VOC air pollution control systems.

Simple Cycle Power System:

7. (1) General Electric LM6000PC SPRINT/EFS gas turbine, 500 MMBTU/hour, natural gas fuel, with a nominal rating of 50 MW.
8. (1) SCR NO_x air pollution control system.
9. (1) Oxidation catalyst CO and VOC air pollution control system.

Support Equipment:

10. (1) Auxiliary Boiler 1A, Babcock & Wilcox, 108.7 MMBTU/hour.
11. (1) Auxiliary Boiler 1B, Cleaver Brooks, 108.7 MMBTU/hour & 4.9 MMBTU/hr pilot burner.
12. (1) SCR system serving Auxiliary Boiler 1B.
13. (1) Cooling tower.

Nitrogen oxide (NO_x) emissions from the gas turbines are controlled with water injection and SCR systems to comply with the NO_x concentration limit of 2.5 ppmvd at 15% oxygen. Oxidation catalyst systems have also been installed for the three gas turbines to reduce VOC and CO emissions. Low NO_x duct burners are used for NO_x control for the HRSGs. Control of NO_x in the Auxiliary Boiler 1A is achieved by low NO_x burners and flue gas recirculation. Control of NO_x in the Auxiliary Boiler 1B is achieved by low NO_x burners, flue gas recirculation, and an SCR.

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

TITLE V PERMIT MODIFICATIONS AND RENEWAL

1. The permit holder must 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 301.3]
2. The permit holder must submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for minor Title V permit modification when applicable. The application must 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 301.5]
3. The permit holder must submit to the SMAQMD Air Pollution Control Officer a complete Title V permit application for Significant Title V permit modification when applicable. The application must 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 301.6]
4. The permit holder must 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 permit holder must 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 permit holder must 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]
8. Any Title V application form, report, or compliance certification submitted pursuant to a federally enforceable requirement in this permit must contain certification by a responsible official. The certification must 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]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

9. This Title V permit has a 5-year fixed term from the date of issuance. The Title V permit will 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]

PERMIT COMPLIANCE

10. The permit holder must comply with all conditions of the Title V permit.

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

11. It is not be a defense for a permit holder 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 permit holder must 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 permit holder must 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 permit holder 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 is also 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)]

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 permit holder must allow the SMAQMD Air Pollution Control Officer or an authorized representative to perform all of the following:

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

- 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 permit holder must 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. All instances of deviations from Title V permit monitoring conditions must be clearly identified in such reports.
- B. The reporting periods for this permit are January 1 through June 30 and July 1 through December 31. The reports must 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 must 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]

19. Compliance Reports

- A. The permit holder must 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 is January 1 through December 31. The report must be submitted by January 30 following the reporting period.
- C. All required reports must be certified by the responsible official and must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

D. The Compliance Certification Report must 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 permit holder must 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 permit holder must 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]

21. All monitoring data and support information required by a federally enforceable applicable requirement must be kept by the permit holder 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 permit holder must 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

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

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 permit holder must 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 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 permit holder must 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]

25. The permit holder must 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]

SULFUR COMPOUNDS

26. The permit holder must 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]

27. Except as otherwise provided in SMAQMD Rule 420 Section 110, the permit holder must 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]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

ARCHITECTURAL COATING

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

[SMAQMD Rule 442]

29. All VOC-containing materials must 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]

30. The permit holder must comply with the requirements of SMAQMD Rule 466 Solvent Cleaning when using volatile organic compounds for the cleanup of architectural coating application equipment or for other applications of solvent cleaning at the facility.

[SMAQMD Rule 466]

31. The permit holder must 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 and SMAQMD Rule 207 Section 305]

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 must be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An emergency occurred and that the permit holder 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 permit holder took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Title V permit.
- iv. The permit holder 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 permit holder seeking to establish the occurrence of an emergency has the burden of proof.

[SMAQMD Rule 207 Section 414]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

33. The permit holder must 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 must be made at the commencement of the next regular working day. The notification must 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 assessed in accordance with SMAQMD Rule 301 Section 313.

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

35. After the provisions for granting permits as set forth in SMAQMD Rule 207 have been complied with, the permit holder 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 must be increased by one half the amount and the applicant/permit holder must 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/permit holder 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 permit holder, operating any major stationary source of VOC or NO_x, must 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 permit holder, when operating any stationary source that emits 25 tons or more per year of VOC or NO_x, must annually provide the SMAQMD Air Pollution Control Officer with a written emission statement showing actual emissions of VOC and NO_x from that source.

[SMAQMD Rule 105]

EMERGENCY EPISODE PLAN

38. The permit holder, operating any stationary source that emits more than 50 tons or more per year of VOC or NO_x or 100 tons or more per year of PM₁₀ or CO, must maintain an approved Emergency Episode Plan and must 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]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

ACCIDENTAL RELEASES

39. If the permit holder is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permit holder must 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 Part 68]

40. If the permit holder is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permit holder must 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 permit holder is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permit holder must 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 permit holder is subject to Section 112(r) of the federal Clean Air Act of 1990 and 40 CFR 68, the permit holder must 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 permit holder, 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 permit holder, 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]

III. FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

PERMIT SHIELD

46. The installation of an identical substitute engine core for either the Gas Turbine 1A, 1B or 1C for routine maintenance and repair of its original engine core does not constitute a modification pursuant to SMAQMD Rule 202 & 214 Section 229 provided:

- A. The operation of the temporary substitute engine core must not involve upgrades or changes to heat input, production rate, method of operation, exhaust gas emissions or emissions control technology, and
- B. All of the original emission control systems, heat recovery equipment, fuel supply systems, lubrication systems, certified CEMS/DAHS and other auxiliary equipment associated with the generation unit must remain in place.

[Basis: SMAQMD Rule 202 & 214 Section 229 and SMAQMD Rule 207 Section 307.1]

47. For each gas turbine, compliance with the 2.5 PPM NO_x emission standard is considered compliance with the 9.0 PPM NO_x emission standard (including the determination method of Rule 413) in V-A.(2).1, V-A.(2).11, and V-A.(2).12, respectively.

[Basis: SMAQMD Rule 202, Rule 413, Section 302.1(d), and US EPA Title V White Paper Number 2]

IV. 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.
[Basis: General Rule limitation]

SMAQMD RULE 201 PERMIT RENEWAL

2. Permits to Operate issued, pursuant to SMAQMD Rule 201 (non-Title V Permits to Operate), must be renewed annually on August 22 and upon payment of the permit renewal fee established pursuant to SMAQMD Rule 301.
[Basis: SMAQMD Rule 201, Section 305]
3. The SMAQMD Air Pollution Control Officer must review every SMAQMD Rule 201 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 must 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 must revise the conditions, if such conditions are not consistent, in accordance with all applicable SMAQMD rules and regulations.
[Basis: California Health and Safety Code Section 42301(c)]

GENERAL

4. The SMAQMD Air Pollution Control Officer and/or authorized representatives, upon the presentation of credentials must 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.
 - 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.
 - C. To inspect any equipment, operation, or method required in this Permit to Operate.
 - D. To sample emissions from the source or require samples to be taken.
[Basis: SMAQMD Rule 201, Section 405]
5. Legible copies of all SMAQMD Rule 201 permits must be maintained on the premises with the equipment.
[Basis: SMAQMD Rule 201, Section 401]

EQUIPMENT OPERATION

6. The equipment must be properly maintained and operated in accordance with the manufacturer's recommendation at all times.

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

[Basis: SMAQMD Rule 201, Section 405]

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.

[Basis: SMAQMD Rule 201, Section 405]

8. The equipment must not discharge such quantities of air contaminants or other materials which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

[Basis: SMAQMD Rule 402, Section 301]

EQUIPMENT BREAKDOWNS

9. The permit holder must 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 must be made at the commencement of the next regular working day. The notification must identify the time, specific location, equipment involved, and to the extent known, the cause(s) of the occurrence.

[Basis: SMAQMD Rule 602]

10. Upon notification of the breakdown condition, the SMAQMD Air Pollution Control Officer must 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.

[Basis: SMAQMD Rule 602]

11. 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 is 96 hours), constitutes 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 is 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

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

- C. The breakdown does not interfere with the attainment and maintenance of any national ambient air quality standard.

[Basis: SMAQMD Rule 602]

12. An occurrence which constitutes a breakdown condition must 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 is 96 hours), unless an emergency variance has been obtained.

[Basis: SMAQMD Rule 602]

13. 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 is 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.

[Basis: SMAQMD Rule 602]

14. No emergency variance will 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.

[Basis: SMAQMD Rule 602]

15. 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 govern any further proceedings conducted under this section.

[Basis: SMAQMD Rule 602]

16. An emergency variance will 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.

[Basis: SMAQMD Rule 602]

17. Within one week after a breakdown condition has been corrected, the owner or operator must submit a written report to the SMAQMD Air Pollution Control Officer on forms supplied by the

IV. NON-FEDERALLY ENFORCEABLE REQUIREMENTS - GENERAL

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.
[Basis: SMAQMD Rule 602]

18. The burden of proof will 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 will undertake appropriate enforcement action.

[Basis: SMAQMD Rule 602]

19. Any failure to comply, or comply in a timely manner, with the reporting requirements established in SMAQMD Rule 602 Sections 301.1 and 401 will constitute a separate violation of SMAQMD Rule 602.

[Basis: SMAQMD Rule 602]

20. It will 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.

[Basis: SMAQMD Rule 602]

21. Severability - if any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgment will not affect or invalidate the remainder of these conditions.

[Basis: SMAQMD Rule 101]

TOXICS

22. The permit holder must, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)

[Basis: SMAQMD Rule 201]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(1) EQUIPMENT DESCRIPTION -

(1) 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.	LM6000PC SPRINT/EFS
Type	Combined Cycle
Nominal Rating	50 MW
Heat Input Rating	500 MMBTU/hour
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 - VOC 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.	LM6000PC SPRINT/EFS
Type	Combined Cycle
Nominal Rating	50 MW
Heat Input Rating	500 MMBTU/hour
Primary Fuel	Natural Gas

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(1) EQUIPMENT DESCRIPTION -

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 - VOC 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. LM6000PC SPRINT/EFS

Type Simple Cycle

Nominal Rating 50 MW

Heat Input Rating 500 MMBTU/hour

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 - VOC 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

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

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

EMISSION LIMITATION REQUIREMENTS

1. The gas turbines 1A and 1B with duct burners 1A and 1B, and gas turbine 1C must not emit NO_x in concentrations greater than the following:

[SMAQMD Rule Nos. 201 and 202]

Equipment	Maximum Allowable NO _x Concentration Excluding start-ups as defined in Condition Nos. 11 and 12 (ppmvd at 15% O ₂ , any consecutive 3 hour average)
Gas Turbine 1A with Duct Burner 1A	2.5
Gas Turbine 1B with Duct Burner 1B	2.5
Gas Turbine 1C	2.5

2. Emissions from gas turbines 1A, 1B and 1C and duct burners 1A and 1B must not exceed the following limits:

[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Hourly Emissions Excluding start-ups as defined in Condition Nos. 11 and 12 (lb/hour, any consecutive 3 hour average)		
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C
VOC	1.80 (A)	1.80 (A)	1.18 (F)
NO _x	5.37 (B)	5.37 (B)	4.60 (B)
SO ₂	0.35 (C)	0.35 (C)	0.30 (G)
PM ₁₀	3.30 (D)	3.30 (D)	2.50 (H)
PM _{2.5}	3.30 (I)	3.30 (I)	2.50 (I)
CO	7.85 (E)	7.85 (E)	6.73 (E)

(A) Based on a turbine VOC emission factor of 0.00236 lb/MMBTU, duct burner VOC emission factor of 0.0075 lb/MMBTU and firing at full capacity.

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

- (B) Based on data submitted in the permit application and is monitored by the turbine's NO_x CEM system.
- (C) Based on a turbine and duct burner SO₂ 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 VOC emission factor of 0.00236 lb/MMBTU and firing at full capacity.
- (G) Based on a turbine SO₂ 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.
- (I) Emissions are listed here for inventory purposes only. Emissions are based on the PM₁₀ emissions assuming all PM₁₀ to be PM_{2.5}.

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

Pollutant	Maximum Allowable Daily Emissions from the Turbines, Cooling Tower and Auxiliary Boiler 1A, Including Start-Ups and Shutdowns (A) (lb/day)					
	Gas Turbine 1A and Duct Burner 1A	Gas Turbine 1B and Duct Burner 1B	Gas Turbine 1C	Auxiliary Boiler 1A	Cooling Tower	Total
VOC	43.2	43.2	28.3	9.8	N/A	124.5
NO _x	144.9	144.9	120.3	27.6	N/A	437.7
SO ₂	8.4	8.4	7.2	1.8	N/A	25.8
PM ₁₀	79.2	79.2	60	13.1	7	238.5
PM _{2.5} (B)	79.2	79.2	60	13.1	7	238.5
CO	197.3	197.3	163.9	170.8	N/A	729.3

- (A) Auxiliary Boiler 1B is not included because it was permitted separately, at a later date, and thus the CEMS/DAS do not quantify the Auxiliary Boiler 1B emissions as part of the total "facility" emissions.
- (B) PM_{2.5} emissions are listed here for inventory purposes only. PM_{2.5} was not a regulated pollutant at the time the local permits were issued.

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

4. Emissions from combined cycle gas turbines 1A and 1B and duct burners 1A and 1B, including start-ups and shutdowns, must not exceed the following limits:

[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Quarterly Emissions (A) Combined Cycle Gas Turbines 1A and 1B and Duct Burners 1A and 1B Combined			
	Quarter 1 (lb/quarter)	Quarter 2 (lb/quarter)	Quarter 3 (lb/quarter)	Quarter 4 (lb/quarter)
NO _x	21,090	21,320	21,550	21,550

(A) The purpose of requiring quarterly NO_x mass emission limits is for the calculation of NO_x Emission Reduction Credits from the combined cycle gas turbine and duct burner modifications.

5. Emissions from the following equipment at the facility must not exceed the following limits:

[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions (A) (Including 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 1A; and Cooling Tower				
	Quarter 1 (lb/quarter)	Quarter 2 (lb/quarter)	Quarter 3 (lb/quarter)	Quarter 4 (lb/quarter)	Total (lb/year)
VOC	8,287	8,380	8,472	8,472	33,611
NO _x	28,993	29,305	29,618	29,618	117,534
SO ₂	1,901	1,923	1,944	1,944	7,712
PM ₁₀	17,220	17,411	17,603	17,603	69,837
PM _{2.5} (B)	17,220	17,411	17,603	17,603	69,837
CO (C)	48,994	49,535	50,075	50,075	198,679

(A) Excludes emissions from Auxiliary Boiler 1B (except for CO) because Auxiliary Boiler 1B was offset independently from the rest of the facility.

(B) PM_{2.5} emissions are listed here for inventory purposes only. PM_{2.5} was not a regulated pollutant at the time the local permits were issued.

(C) CO emission limits apply to the entire facility, including Auxiliary Boiler 1B

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

6. Emissions of HAPs from the facility must not exceed the following limits:

Equipment	Maximum Allowable HAP Annual 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 YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Gas Turbines.

EQUIPMENT OPERATION REQUIREMENTS

7. Gas turbines 1A, 1B, and 1C and duct burners 1A and 1B must be fired only on natural gas.
[SMAQMD Rule Nos. 201 and 202]
8. Duct burners 1A and 1B must not be operated unless their associated combined cycle gas turbine (1A or 1B) is operating.
[SMAQMD Rule Nos. 201 and 202]
9. Gas turbines 1A and 1B and/or the duct burners 1A and 1B must not be operated without a fully functioning selective catalytic NO_x reduction air pollution control system and oxidizing CO catalyst air pollution control system, excluding periods of start-ups (as defined in Condition No. 11).
[SMAQMD Rule Nos. 201 and 202]
10. Gas turbine 1C must not be operated without a fully functioning selective catalytic NO_x reduction air pollution control system and oxidizing CO catalyst air pollution control system, excluding periods of start-ups (as defined in Condition No. 12).
[SMAQMD Rule Nos. 201 and 202]
11. The individual start-up period of gas turbine 1A and 1B must not exceed 60 minutes. The start-up period for an individual gas turbine 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]
12. The start-up period of gas turbine 1C must not exceed 30 minutes. 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]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

MONITORING REQUIREMENTS

13. The permit holder must operate a Continuous Emission Monitoring System (CEMS) 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 System (CEMS) must monitor and record nitrogen oxides, carbon monoxide and oxygen.
- B. For NO_x and O₂, the CEMS must comply with U.S. EPA Performance Specifications in 40 CFR 75 Appendix A.
- C. For CO, the CEMS must comply with U.S. EPA Performance Specifications in 40 CFR 60 Appendix B Performance Specification 4.

14. The permit holder must 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

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

RECORDKEEPING AND REPORTING REQUIREMENTS

15. The following records must be continuously maintained on site for the most recent five-year period and must be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly records as specified in the table below must 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	<ul style="list-style-type: none"> A. Record of the occurrence date 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 monitoring system and the continuous parameter monitoring system. D. Monitoring device and performance testing measurements including date, location, time of sampling, date analyses were performed by lab, company or entity that performed the test and analyses, analytical techniques or methods used, the results of such analyses, and the operating conditions existing at the time of sampling. 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.
Hourly	<ul style="list-style-type: none"> H. Natural gas fuel consumption of each of the gas turbines 1A, 1B and 1C (MMBTU/hour). I. Natural gas fuel consumption of each of the duct burners 1A and 1B (MMBTU/hour). J. Indicate when the startup for each gas turbine 1A, 1B and 1C occurred. K. <ul style="list-style-type: none"> i. VOC, NO_x, SO₂, PM₁₀ and CO hourly emissions (lb/hour) from: <ul style="list-style-type: none"> a. Gas turbine 1A and duct burner 1A b. Gas turbine 1B and duct burner 1B c. Gas turbine 1C ii. For those pollutants directly monitored (NO_x and CO), the hourly emissions will be from the CEMS required pursuant to Condition No. 13. iii. For those pollutants that are not directly monitored (VOC, SO₂

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Frequency	Information to be Recorded
	<p>and PM10), the hourly emissions must be calculated based on SMAQMD approved emission factors contained in the footnotes to Condition No. 2.</p> <p>L. NO_x emission concentration (ppmvd at 15% O₂) from:</p> <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
Daily	<p>M. VOC, NO_x, SO₂, PM10 and CO daily mass emissions (lb/day) individually from:</p> <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
Quarterly	<p>N. Total quarterly NO_x mass emissions of gas turbine 1A and 1B and duct burners 1A and 1B combined (lb/quarter).</p> <p>O. Total VOC, NO_x, SO₂, PM10 and CO quarterly mass emissions from all permitted equipment at the facility except for Auxiliary Boiler 1B (lb/quarter).</p> <p>P. Total CO quarterly mass emissions from all permitted equipment at the facility, including Auxiliary Boiler 1B (lb/quarter).</p>

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NOx SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

16. Submit to the SMAQMD Air Pollution Control Officer a written report which contains the following information. Each quarterly report is due by the 30th day following the end of the calendar quarter.

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

Frequency	Information to be Reported
Quarterly Submitted by: January 30 April 30 July 30 October 30 for the previous calendar quarter	<p>A. 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>B. 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 must 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 are no excess emissions or the continuous monitoring system has not been inoperative, repaired or adjusted for a calendar quarter, a report must be submitted stating such information.</p>

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

17. The permit holder must surrender (and has surrendered - See Condition Nos. 18, 19 and 20) 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 1A & 1B Cooling Tower	Amount of Emission Offsets for which ERCs are to be Surrendered (lb/quarter)			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Equipment - Gas Turbine 1A, 1B and 1C Duct Burners 1A and 1B Auxiliary Boiler 1A & 1B Cooling Tower	Amount of Emission Offsets for which ERCs are to be Surrendered (lb/quarter)			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4
VOC	1,529	1,715	1,207	1,257
NO _x	50,494	51,140	50,865	50,786
PM ₁₀	18,198	18,511	17,912	17,979
PM _{2.5} (A)	978	1,100	309	376

(A) PM_{2.5} was not a regulated pollutant under Rule 202 at the time the local permits were issued, except for Auxiliary Boiler 1B. Therefore, PM_{2.5} offsets were required only for Auxiliary Boiler 1B. PM_{2.5} emission were assumed to be the same as PM₁₀.

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

[SMAQMD Rule 202]

ERC Certificate No. (A)	Face Value of Emission Reduction Credit Certificates (lb/quarter)				IPTR (B)	Offset Ratio	Value Applied to VOC Emission Liability (lb/quarter)			
	Qtr 1	Qtr 2	Qtr 3	Qtr 4			Qtr 1	Qtr 2	Qtr 3	Qtr 4
PCAPCD 2000-02 Formica (VOC)	1,181	1,320	1,458	1,458	NA	1.5	787	880	972	972
FRAQMD ERC 99001-F- S1-S1	1,484	1,670	470	570	N/A	2.0	742	835	235	285
Total VOC Emission Offsets							1,529	1,715	1,207	1,257

(A) ERC 99001-F-S1-S1 is the fraction of FRAQMD ERC #99001-T2 applied to offset auxiliary boiler 1B

(B) IPTR = interpollutant trading ratio

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

[SMAQMD Rule 202]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NOx SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

ERC Certificate No.(A)	Face Value of Emission Reduction Credit Certificates (lb/quarter)				IPTR (B)	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 (VOC)	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
SMAQMD 00735 Campbell Soup (NOx)	2318	2476	0	1633	NA	1.2	1932	2063	0	1361
FRAQMD ERC 99001-F- S1-S1	2,886	3,100	1,474	1,316	N/A	2	1,443	1,550	737	658
Subtotal NOx							50,494	51,140	52,024	49,627

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NOx SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

ERC Certificate No.(A)	Face Value of Emission Reduction Credit Certificates (lb/quarter)				IPTR (B)	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
Move 1159 lb of surplus ERCs from Qtr 3 to Qtr 4 (C)								-1159	+1159	
Total NOx Emission Offsets						50,494	51,140	50865	50,786	

(A) ERC 99001-F-S1-S1 is the fraction of FRAQMD ERC #99001-T2 applied to offset auxiliary boiler 1B

(B) IPTR = interpollutant trading ratio

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

20. 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. 17:

[SMAQMD Rule 202]

Offset Source (A)	Face Value of Emission Reduction credit Certificates (lb/quarter)				IPTR (B)	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
PCAPCD 97-00001 Sierra Pine (PM10)	1,250	1,263	1,278	1,278	NA	1.5	833	842	852	852
FRAQMD ERC 99001-F-S1-S1	1,956	2,200	618	752	N/A	2	978	1,100	309	376

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Total PM10 Emission Offsets	18,198	18,511	17,912	17,979
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(A) ERC 99001-F-S1-S1 is the fraction of FRAQMD ERC #99001-T2 applied to offset auxiliary boiler 1B

(B) IPTR = interpollutant trading ratio

21. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the PM_{2.5} emission offset requirements as stated in Condition No. 17:

[SMAQMD Rule 202]

Offset Source(A)	Face Value of Emission Reduction credit Certificates (lb/quarter)				IPTR (B)	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
FRAQMD ERC 99001-F-S1-S1 (C)	1,956	2,200	618	752	N/A	2	978	1,100	309	376
Total PM2.5 Emission Offsets							978	1,100	309	376

(A) ERC 99001-F-S1-S1 is the fraction of FRAQMD ERC #99001-T2 applied to offset auxiliary boiler 1B

(B) IPTR = interpollutant trading ratio

(C) PM_{2.5} is not addressed on the certificate. SMAQMD addressed the PM 2.5 in the certificate under the evaluation of application 24398

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

EMISSION TESTING REQUIREMENTS

22. The permit holder must perform a VOC, NO_x, PM₁₀ and CO source test and CEMS accuracy (RATA) test of gas turbine 1A, 1B and 1C and duct burner 1A and 1B once each calendar year 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 must 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 if the date has changed from that approved in the source test plan.
- C. During the source test(s), each gas turbine and duct burner must be operated at its maximum firing capacity, defined as $\geq 90\%$ of the heat input capacity achievable at the time of the source test, based on then current ambient conditions.
- D. Each gas turbine 1A, 1B and 1C must also be tested at partial load (50%) for VOC 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 VOC and PM₁₀ tests can be conducted every other year if the previous test indicates that the respective hourly emissions are less than or equal to 75% of the hourly respective emission limit.

[SMAQMD Rules 201 and 202 and 40 CFR 50.4340]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(3) NON-FEDERALLY ENFORCEABLE REQUIREMENTS -

(3) NON-FEDERALLY ENFORCEABLE REQUIREMENTS -

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

EMISSION LIMITATION REQUIREMENTS

23. Emissions from gas turbines 1A, 1B and 1C must not exceed the following emissions limit:
[SMAQMD Rule 402]

Pollutant	Maximum Allowable Emissions excluding startups and shutdowns as defined in Condition Nos. 10 and 11 ppmvd at 15% O ₂ measured as NH ₃ , any consecutive 3 hour average
Ammonia (NH ₃)	10

EMISSION TESTING REQUIREMENTS

24. The permit holder must 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 if the date has changed from that approved in the source test plan.
 - C. During the source test(s), each gas turbine and duct burner must be operated at its maximum firing capacity, defined as $\geq 90\%$ of the heat input capacity achievable at the time of the source test, based on then current ambient conditions.
 - D. Each gas turbine 1A, 1B and 1C must also be tested at partial load (50%) for VOC 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).

[SMAQMD Rule 201]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(4) TITLE IV ACID RAIN PERMIT

(4) 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 must:

- 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 must:

- 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, must 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 must 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 must be collected and analyzed:

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(4) TITLE IV ACID RAIN PERMIT

- 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 must 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 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 must 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 must 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 must 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)]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(4) TITLE IV ACID RAIN PERMIT

SULFUR DIOXIDE REQUIREMENTS

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

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 constitutes a separate violation of the federal Clean Air Act.

[40 CFR 72.9(c)(2)]

32. An affected unit is 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 must 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 cannot 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 can be construed to limit the authority of the United States to terminate or limit such authorization.

[40 CFR 72.9(c)(6)]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(4) TITLE IV ACID RAIN PERMIT

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 must 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 must 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 must:

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 must 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 must 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.

C. Copies of all reports, compliance certifications and other submissions and all records

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(4) TITLE IV ACID RAIN PERMIT

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 must 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, will 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 will 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 will 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 must meet the requirements of the Acid Rain Program.

[40 CFR 72.9(g)(4)]

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) also applies to the owners and operators of such source and of the affected units at the source.

[40 CFR 72.9(g)(5)]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

A. GAS TURBINES 1A, 1B AND 1C

DUCT BURNERS 1A AND 1B

APC NO_x SCR SYSTEMS 1A, 1B AND 1C

APC VOC AND CO OXIDATION CATALYST SYSTEMS 1A, 1B AND 1C

(4) TITLE IV ACID RAIN PERMIT

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) also applies 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, will 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 must 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 do 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)]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER 1A

AUXILIARY BOILER 1B

(1) EQUIPMENT DESCRIPTION –

(1) 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 1A

P/O No. 12318 (Rev 5 - Permit number is for reference purposes only - not federally enforceable)
Manufacturer: Babcock and Wilcox
Model No.: FM103-88
Burner Type: Todd Ultra Low NOx Rapid Mix Burner System
Heat Input: 108.7 MMBTU/hour
Fuel: Natural gas

AUXILIARY BOILER 1B

P/O No. 24398 (Permit number is for reference purposes only - not federally enforceable)
Manufacturer: Cleaver Brooks
Model No.: LD-94-R,H
Heat Input: 108.7 MMBTU/hour
Fuel: Natural gas
Equipped with a 4.9 MMBTU/hr pilot burner

AIR POLLUTION CONTROL SYSTEM 1B - NOx

Permit No. 24399 (Permit number is for reference purposes only – not federally enforceable)
Control Device: SCR system
Venting Auxiliary Boiler 1B

V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER 1A

AUXILIARY BOILER 1B

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

(2) 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 1A emissions must not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Pollutant	Maximum Allowable Emissions (Averaged over a 3-hour period)		
	Concentration (ppmvd corrected to 3% O ₂) excluding periods of startups and shutdowns (A)	Hourly Emissions (lb/hour) including periods of startups and shutdowns (A)	Daily Emissions (lb/day)
VOC (B)	---	0.41	9.8
NOx (C)	9 (A)	1.15	27.6
SOx (D)	---	0.08	1.8
PM10 (E)	---	0.54	13.1
PM2.5 (F)	---	0.54	13.1
CO (G)	400 (A)	7.12	170.8

(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) VOC emission based on a VOC emission factor of 0.00377 lb/MMBTU and firing at full capacity.

(C) NOx emission based on NOx data submitted in the permit application and monitoring data from the boiler's NOx CEM system.

(D) SOx emission based on a SO₂ 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) Emissions are listed here for inventory purposes only. Emissions are based on the PM10 emissions assuming all PM10 to be PM2.5.

(G) CO emission based on CO data submitted in the permit application and monitoring data from the boiler's CO CEM system.

V. EQUIPMENT SPECIFIC REQUIREMENTS -
B. AUXILIARY BOILER 1A
AUXILIARY BOILER 1B
(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

2. The Auxiliary Boiler 1B emissions must not exceed the following limits:
[SMAQMD Rule Nos. 201 and 202]

Table 1

Pollutant	Maximum Allowable Emissions any consecutive 3 hour average
	(ppmvd corrected to 3% O ₂) excluding periods of startups and shutdowns as defined by condition V.B.2.8
VOC	---
NOx	5
SO ₂	---
PM10	---
PM2.5	---
CO	283.8

Table 2

Pollutant	Maximum Allowable Daily Emissions (A) (lb/day)
VOC	9.8
NOx	23.0
SOx	1.6
PM10	13.0
PM2.5	13.0
CO	547.8

(A) Emissions are based on the main burner operating at 108.7 MMBTU/hr, 1,000 BTU/scf, for 24 hr/day and the Emission Factors shown in Table 4. For NOx, the first two hours, the boiler is assumed to operate at 30 ppm, corrected to 3% O₂, the next hour at 9 ppm, corrected to 3% O₂ and the remaining 21 hours at 5 ppm, corrected to 3% O₂.

V. EQUIPMENT SPECIFIC REQUIREMENTS -
B. AUXILIARY BOILER 1A
AUXILIARY BOILER 1B
(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Table 3

Pollutant	Maximum Allowable Emissions				
	Quarter 1 (A) (lb/qtr)	Quarter 2 (B) (lb/qtr)	Quarter 3 (C) (lb/qtr)	Quarter 4 (D) (lb/qtr)	Year (lbs)
VOC	742	835	235	285	2,097
NOx	1,443	1,550	737	658	4,388
Sox	118	133	37	45	333
PM10	978	1,100	309	376	2,763
PM2.5	978	1,100	309	376	2,763
CO	41,329	46,483	13,064	15,879	116,755

- (A) Emissions are based on a quarterly fuel usage of 196.8 MMCF/qtr and the emission factors in Table 4.
(B) Emissions are based on a quarterly fuel usage of 221.3 MMCF/qtr and the emission factors in Table 4.
(C) Emissions are based on a quarterly fuel usage of 62.2 MMCF/qtr and the emission factors in Table 4.
(D) Emissions are based on a quarterly fuel usage of 75.6 MMCF/qtr and the emission factors in Table 4.

Table 4 - The following emission factors are used in calculating the daily and quarterly emissions

Emission Factors		
Pollutant	Pilot Burner (A) (lb/MMCF)	Main Burner (B) (lb/MMCF)
VOC	5.4	3.77
NOx (C)	As monitored by the CEM System	As monitored by the CEM System
SOx	0.6	0.6
PM10	7.5	4.97
PM2.5	7.5	4.97
CO (C)	As monitored by the CEM System	As monitored by the CEM System

- (A) Emission factors for VOC, SOx, and PM10 (assume all of the PM10 is PM2.5) are from AP-42, Tables 1.4-1 & 1.4-2 (07/98) assuming 1,000 btu/scf.
(B) Emission factors for SOx are from AP-42, Tables 1.4-1 & 1.4-2 (07/98) assuming 1,000 btu/scf. VOC and PM10 (assume all of the PM10 is PM2.5) are per the applicant request. NOx and CO emissions will be determined as monitored by the Continuous Emission Monitor System
(C) NOx and CO are monitored by the CEM system therefore do not have an emission factor.

V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER 1A

AUXILIARY BOILER 1B

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

3. Emissions from all equipment at the Sacramento Cogeneration Authority facility (Gas Turbine 1A, 1B, 1C, Duct Burners 1A and 1B, APC NOx SCR System 1A, 1B, 1C, APC CO Oxidation Catalyst 1A, 1B and 1C, Auxiliary Boiler 1A and 1B, Cooling Tower), including periods of startups and shutdowns, must not exceed the following limits.

[Basis: SMAQMD Rule 201, Section 405 and Rule 202]

Emission Limits					
Pollutant	Quarter 1 (lb/qtr)	Quarter 2 (lb/qtr)	Quarter 3 (lb/qtr)	Quarter 4 (lb/qtr)	Year Lbs
CO	48,994	49,535	50,075	50,075	198,679

EQUIPMENT OPERATION AND MONITORING REQUIREMENTS

4. The auxiliary boiler 1A must not exceed an annual capacity factor of 80% based on heat input.

[SMAQMD Rule Nos. 201 and 202]

5. The auxiliary boilers must only combust natural gas fuel.

[SMAQMD Rule Nos. 201 and 202]

6. The maximum fuel usage for auxiliary boiler 1B with the associated pilot burner must not exceed the following

[Basis: SMAQMD Rule 202, Section 301]

Natural Gas Fuel Usage				
Q1 (MMCF)	Q2 (MMCF)	Q3 (MMCF)	Q4 (MMCF)	Year (MMCF)
196.8	221.3	62.2	75.6	556

7. The auxiliary boiler 1B is subject to two startup periods and a shutdown period.
- A. The total duration of the auxiliary boiler's startup period must not exceed 180 minutes. Startups are defined as time periods commencing with the introduction of fuel to the boiler (pilot burner and/or main burner), and ending at the time that the 15-minute average NOx and CO concentrations do not exceed 5.0 ppmvd, corrected to 3% O2 and 283.8 ppmvd, corrected to 3% O2 respectively, but in no case exceeding 180 consecutive minutes. During this startup period the NOx and CO mass emissions must not exceed 9.1 lb and 68.5 lb respectively.
- B. In order to determine compliance with startup provisions specified in Rule 411, the boiler must be constrained to an additional startup period not to exceed 120 minutes. For this additional startup provision, the time period commences with the introduction of fuel to the boiler (pilot burner and/or main burner), and ending at the time that the 15-minute average NOx and CO concentrations do not exceed 9.0 ppmvd, corrected to 3% O2 and

V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER 1A

AUXILIARY BOILER 1B

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

283.8 ppmvd, corrected to 3% O₂ respectively, but in no case exceeding 120 consecutive minutes. During this startup period the NO_x and CO mass emissions must not exceed 7.9 lb and 45.7 lb respectively.

- C. The total duration of the auxiliary boiler's shutdown period must not exceed 60 minutes. Shutdowns are defined as time periods commencing with the reduction of fuel flow to the boiler (pilot burner and/or main burner), and ending at the time that all fuel flow has ceased. During this shutdown period the NO_x and CO mass emissions must not exceed 0.7 lb and 22.8 lb respectively.

[Basis: SMAQMD Rule 202, Section 301 and Rule 411, Section 222]

8. The Sacramento Cogeneration Authority must operate a continuous emission monitoring system (CEMS) that has been approved by the SMAQMD Air Pollution Control Officer, for the boilers' emissions (auxiliary boilers 1A and 1B).

A. The CEM system must monitor and record concentrations of NO_x, CO and oxygen.

B. The CEM system must comply with the U.S. EPA Performance Specifications (40 CFR 60, Appendix B, Performance Specifications 2, 3 and 4).

[Basis: SMAQMD Rule 201, Section 405 and Rule 202]

9. The Sacramento Cogeneration Authority must operate a continuous parameter monitoring system for each boiler that has been approved by the SMAQMD Air Pollution Control Officer that either measures, or calculates and records the following.

[Basis: SMAQMD Rule 201, Section 405 and Rule 202]

Parameter to be Monitored	Units
Fuel consumption of the boiler	MMCF/hr of natural gas

RECORDKEEPING AND REPORTING REQUIREMENTS

10. The following records must be continuously maintained for each respective boiler on site for the most recent five-year period and must be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly and yearly records as specified in the table below must 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 (A)
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V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER 1A

AUXILIARY BOILER 1B

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Frequency	Information to be Recorded (A)
At all times	<p>A. Measurements from the continuous emissions monitoring system and parameter monitoring system.</p> <p>B. Monitoring device and performance testing measurements.</p> <p>C. All continuous monitoring system performance evaluations.</p> <p>D. All continuous monitoring system or monitoring device calibration checks.</p> <p>E. All continuous monitoring system adjustments and maintenance.</p> <p>F. Any previous source test results.</p>
Hourly	<p>G. Auxiliary boiler natural gas fuel consumption (MMBTU/hour), for each boiler.</p> <p>H. Auxiliary boiler NO_x concentration for each boiler. (ppmvd, corrected to 3% O₂, 3-hour average)</p> <p>I. Auxiliary boiler VOC, NO_x, SO₂, PM₁₀, PM_{2.5} (Aux Boiler 1B only), and CO hourly emissions. (lb/hour), for each boiler.</p> <p>i. For those pollutants directly monitored (NO_x and CO), the hourly emissions must be calculated based on the CEM system required pursuant to Condition No. 9.</p> <p>ii. For those pollutants that are not directly monitored (VOC, SO₂, PM₁₀, and PM_{2.5} as applicable), the hourly emissions must be calculated based on the following: Auxiliary Boiler 1A: 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 auxiliary boiler 1A. Auxiliary Boiler 1B: The emission factor specified in condition 2, table 4, multiplied by the actual fuel flow rate of auxiliary boiler 1B.</p>
Daily	J. Total VOC, NO ₂ , SO ₂ , PM ₁₀ , PM _{2.5} (Aux Boiler 1B only), and CO daily mass emissions for each auxiliary boiler. (lb/day)
Monthly	K. The natural gas fuel consumption (MMCF/month) for auxiliary boiler 1B.

V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER 1A

AUXILIARY BOILER 1B

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Frequency	Information to be Recorded (A)
Quarterly	<p>L. Total combined facility VOC, NO_x, SO₂, PM₁₀ and CO quarterly mass emissions excluding Auxiliary Boiler 1B (lb/quarter).</p> <p>M. Total quarterly VOC, NO_x, SO_x, PM₁₀, PM_{2.5}, and CO emissions from auxiliary boiler 1B (lb/quarter).</p> <p>N. Total combined facility CO quarterly mass emissions, including Auxiliary Boiler 1B (lb/quarter).</p> <p>O. The natural gas fuel consumption (MMCF/qtr) for auxiliary boiler 1B.</p>
Annually	<p>N. Annual capacity factor of auxiliary boiler 1A based on heat input. (%)</p> <p>O. Total yearly VOC, NO_x, SO_x, PM₁₀, PM_{2.5} (Aux Boiler 1B only), and CO emissions from all equipment combined at the Sacramento Cogeneration Authority facility (lb/year).</p>

(A) PM_{2.5} emissions reporting applies only to Auxiliary Boiler 1B at this time.

11. 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
<p>Quarterly</p> <p>Due by:</p> <p>Jan 30</p> <p>Apr 30</p> <p>Jul 30</p> <p>Oct 30</p> <p>for the previous calendar quarter</p>	<p>A. Whenever the CEM system is inoperative except for zero and span checks:</p> <p>i. Date and time of non-operation of the continuous emission monitoring system.</p> <p>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> <p>i. Magnitude of the emission which has been determined to be in excess.</p> <p>ii. Date and time of the commencement and completion of each period of excess emissions.</p>

V. EQUIPMENT SPECIFIC REQUIREMENTS -
B. AUXILIARY BOILER 1A
AUXILIARY BOILER 1B
(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Frequency	Information to be Reported
	<p>iii. Periods of excess emissions due to startup, shutdown and malfunction must be specifically identified.</p> <p>iv. The nature and cause of any malfunction (if known).</p> <p>v. The corrective action taken or preventive measures adopted.</p> <p>C. If there were no excess emissions for a calendar quarter:</p> <p>i. A report must be submitted indicating that there were no excess emissions.</p>

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

12. The permit holder must surrender upon commencement of operation ERCs to the SMAQMD Air Pollution Control Officer to offset the following amount of emissions:
[SMAQMD Rule 202]

Refer to Condition No. V.A.(2)17 for the Gas Turbines

13. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the VOC emission offset requirements.
[SMAQMD Rule 202]

Refer to Condition No. V.A.(2)18 for the Gas Turbines

14. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the NO_x emission offset requirements:
[SMAQMD Rule 202]

Refer to Condition No. V.A.(2)19 for the Gas Turbines

15. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the PM₁₀ emission offset requirement:
[SMAQMD Rule 202]

Refer to Condition No. V.A.(2)20 for the Gas Turbines

16. The following ERCs have been surrendered to the SMAQMD Air Pollution Control Officer to comply with the PM_{2.5} emission offset requirement:
[SMAQMD Rule 202]

V. EQUIPMENT SPECIFIC REQUIREMENTS -
B. AUXILIARY BOILER 1A
AUXILIARY BOILER 1B
(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Refer to Condition No. V.A.(2)21 for the Gas Turbines

EMISSION TESTING REQUIREMENTS

17. A VOC, NO_x, and CO source test and a CEM accuracy (RATA) test of the auxiliary boilers must be performed once every 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. The SMAQMD Air Pollution Control Officer must be notified at least 7 days prior to the emission testing date if the date has changed from that approved in the Source Test Plan.
 - C. During the source test the auxiliary boiler must be operated at greater than 90% of the maximum firing capacity.
 - D. The Source Test Report must be submitted to the SMAQMD Air Pollution Control Officer within 60 days from the completion of the source test(s).
 - E. The VOC test can be conducted every other year if the previous test indicates that the VOC hourly emissions are less than or equal to 75% of the hourly ROC emission limit.
- [Basis: SMAQMD Rule 201, Section 405]**
18. Emission testing must be performed in accordance with the following test methods :
- A. Oxides of Nitrogen – ARB Method 100 or EPA Method 7E
 - B. Volatile Organic Compounds – ARB Method 100 or EPA Method 25A
 - C. Carbon Monoxide – ARB Method 100 or EPA Method 10
 - D. Stack Gas Oxygen – ARB Method 100 or EPA Method 3A
 - E. Carbon Dioxide – ARB Method 100 or EPA Method 3A
- [SMAQMD Rule 411, Section 501]**

V. EQUIPMENT SPECIFIC REQUIREMENTS -

B. AUXILIARY BOILER A

AUXILIARY BOILER B

(3) NON-FEDERALLY ENFORCEABLE REQUIREMENTS -

(3) NON-FEDERALLY ENFORCEABLE REQUIREMENTS -

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

19. Emissions of ammonia (NH₃) from the auxiliary boiler 1B, including startups, must not exceed the following limits:

[Basis: SMAQMD Rule 201, Section 405 and Rule 202]

Maximum Ammonia Emissions (A)								
Pollutant	Emission Factor (ppmvd at 3% O ₂)	Hourly (lb/hr)	Daily (lb/day)	Q1 (lb/qtr)	Q2 (lb/qtr)	Q3 (lb/qtr)	Q4 (lb/qtr)	Year (lb/yr)
NH ₃	20 ppmvd (B)	0.98	23.4	2,107	2,130	2,154	2,154	8,545

(A) Emissions are based on 20 ppmvd @ 3% O₂, 24 hr/day, 90, 91, 92, and 92 days for quarters 1 through 4 respectively.

(B) Compliance with the 20 ppmvd corrected to 3% O₂ NH₃ limit is determined based on source test data.

EMISSIONS TESTING

20. An NH₃ source test of the auxiliary boiler 1B must be performed once every calendar year.
- 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 SMAQMD Air Pollution Control Officer must be notified at least 7 days prior to the emission testing date if the date has changed from that approved in the Source Test Plan.
 - During the source test the auxiliary boiler must be operated at greater than 90% of the maximum firing capacity.
 - The Source Test Report must be submitted to the SMAQMD Air Pollution Control Officer within 60 days from the completion of the source test(s).
 - Ammonia emission testing must be performed in accordance with BAAQMD test method ST1B or an approved equivalent test method.

[Basis: SMAQMD Rule 201, Section 405]

V. EQUIPMENT SPECIFIC REQUIREMENTS -

C. COOLING TOWER

(1) EQUIPMENT DESCRIPTION –

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

(1) 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, 900,000 cfm with drift eliminator
Size: 3 cell
Capacity: 48,850 gallons/minute

(2) 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 must not exceed the following:
[SMAQMD Rule 202]

Pollutant	Maximum Allowable Emissions	
	Hourly Emissions (lb/hour) (A) (Averaged over any consecutive 3 hour period)	Daily Emissions (lb/day)
PM10	0.29 (A)	7
PM2.5	0.29 (A)	7

(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. PM2.5 emissions are the same as PM10 emissions assuming all PM10 to be PM2.5.

2. Emissions from the following equipment at the facility must not exceed the following daily emission limits:
[SMAQMD Rule Nos. 201 and 202]

See Condition No. V.A.(2)3 for the Gas Turbines

V. EQUIPMENT SPECIFIC REQUIREMENTS -

C. COOLING TOWER

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

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

See Condition No. V.A.(2)5 for the Gas Turbines

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

EQUIPMENT OPERATION REQUIREMENTS

None

MONITORING REQUIREMENTS

5. The permit holder must 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
Total dissolved solids content of the circulating water in the cooling tower.	ppmw

RECORDKEEPING AND REPORTING REQUIREMENTS

6. The following records must be continuously maintained on site for the most recent five-year period and must be made available to the SMAQMD Air Pollution Control Officer upon request. Quarterly records must 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	<p>A. Total dissolved solids content of the circulating water in the cooling tower. (ppmw)</p> <p>B. Cooling tower hourly PM10 mass emission rate. (lb PM10/hour)</p> <p>i. The hourly emissions must be calculated based on the cooling water circulation rate multiplied by the cooling tower drift rate, density of water and the measured TDS level.</p>

V. EQUIPMENT SPECIFIC REQUIREMENTS -

C. COOLING TOWER

(2) FEDERALLY ENFORCEABLE REQUIREMENTS -

Frequency	Information to be Recorded
Daily	C. Cooling tower PM10 daily mass emissions. (lb/day)
Quarterly	D. Total facility PM10 quarterly mass emissions. (lb/quarter)

EMISSION REDUCTION CREDIT (ERC) REQUIREMENTS

7. The permit holder 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. V.A.(2)17 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. V.A.(2)20 for the Gas Turbines

V. EQUIPMENT SPECIFIC REQUIREMENTS -

C. COOLING TOWER

(3) NON-FEDERALLY ENFORCEABLE REQUIREMENTS -

(3) NON-FEDERALLY ENFORCEABLE REQUIREMENTS - EQUIPMENT SPECIFIC

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

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

VI. 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 heater, 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.
Aqueous and Anhydrous ammonia storage tanks 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.

VI. 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.

VII. ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

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

ACRONYMS & ABBREVIATIONS:

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.

VII. 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 VOC, NO_x, SO₂ and PM₁₀.

PM

Particulate matter.

PM₁₀

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

PM_{2.5}

Particulate matter with aerodynamic equivalent diameter of less than or equal to 2.5 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.

VII. ACRONYMS, ABBREVIATIONS AND UNITS OF MEASURE

Title V

Title V of the federal Clean Air Act. Title V requires the SMAQMD to implement 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