

# Bay Area Air Quality Management District

939 Ellis Street  
San Francisco, CA 94109  
(415) 771-6000

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**Final**

## MAJOR FACILITY REVIEW PERMIT

Issued To:

**Crockett Cogeneration, A California Limited Partnership  
Facility #A8664**

**Facility Address:**  
550 Loring Avenue  
Crockett, CA 94525

**Mailing Address:**  
550 Loring Avenue  
Crockett, CA 94525

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**Responsible Official**

Mark D. Segel, Partner  
Pacific Crockett Energy, LLC  
781-292-7005

**Facility Contact**

Chris Sargent  
Environmental Coordinator  
510-787-4101

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<b>Type of Facility:</b>	Cogeneration	BAAQMD Permit
Division Contact:		
<b>Primary SIC:</b>	4931	Doug Hall
<b>Product:</b>	Electricity and Steam	Kathleen Truesdell

**ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT**

Signed by Jack P. Broadbent  
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Jack P. Broadbent, Executive Officer/Air Pollution Control Officer

11/18/08  
\_\_\_\_\_  
Date

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## I. STANDARD CONDITIONS

### A. Administrative Requirements

- BAAQMD Regulation 1 - General Provisions and Definitions  
(as amended by the District Board on 7/19/2006);
- SIP Regulation 1 - General Provisions and Definitions  
(as approved by EPA through 6/28/1999);
- BAAQMD Regulation 2, Rule 1 - Permits, General Requirements  
(as amended by the District Board on 7/19/2006);
- SIP Regulation 2, Rule 1 - Permits, General Requirements  
(as approved by EPA through 1/26/1999);
- BAAQMD Regulation 2, Rule 2 - Permits, New Source Review  
(as amended by the District Board on 6/15/2005);
- SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration  
(as approved by EPA through 1/26/1999);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking  
(as amended by the District Board on 12/21/2004);
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking  
(as approved by EPA through 1/26/1999);
- BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review  
(as amended by the District Board on 4/16/2003); and
- SIP Regulation 2, Rule 6 – Permits, Major Facility Review (as approved by EPA through 6/23/95)

### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit was issued on November 18, 2008 and expires on November 17, 2013. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than May 17, 2013 and no earlier than November 18, 2012. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after November 17, 2013.** If the permit renewal has not been issued by November 17, 2013 but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application.  
(Basis: Regulation 2-6-307, 404.2, 407, & 409.6; MOP Volume II, Part 3, §4.2)
2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; reopening the permit for cause prior to the end of the term and terminating, revoking and reissuing, or modifying the permit; or denial of a permit renewal application.  
(Basis: Regulation 2-6-307, 409.8; MOP Volume II, Part 3, §4.11)
3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or

## I. Standard Conditions (continued)

- condition shall not be a defense to such enforcement action.  
(Basis: MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause.  
(Basis: Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
  5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition.  
(Basis: Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
  6. This permit does not convey any property rights of any sort, nor any exclusive privilege.  
(Basis: Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
  7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.  
(Basis: Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
  8. Any records required to be maintained pursuant to this permit that the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code.  
(Basis: Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
  9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information.  
(Basis: 40 CFR Part 2)
  10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations.  
(Basis: MOP Volume II, Part 3, §4.11)
  11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility.  
(Basis: Regulation 2-6-409.20)
  12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors.  
(Basis: Regulation 2-6-307)

## **I. Standard Conditions (continued)**

### **C. Requirement to Pay Fees**

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P.

(Basis: Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

### **D. Inspection and Entry**

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee.

(Basis: Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

### **E. Records**

1. The permit holder must provide any information, records, and reports requested or specified by the APCO.

(Basis: Regulation 1-441, Regulation 2-6-409.4)

2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record.

(Basis: Regulation 2-6-501; MOP Volume II, Part 3, §4.7)

### **F. Monitoring Reports**

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. Reports shall be for the following periods: September 1st through February 28<sup>th</sup> or 29<sup>th</sup> and March 1st through August 31<sup>st</sup>, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109  
Attn: Title V Reports

## **I. Standard Conditions (continued)**

### **G. Compliance Certification**

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be March 1st to February 28<sup>th</sup> or 29<sup>th</sup>. The certification shall be submitted by March 31st of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director of the Air Division  
USEPA, Region IX  
75 Hawthorne Street  
San Francisco, CA 94105  
Attention: Air-3

(Basis: Regulation 2-6-409.17; MOP Volume II, Part 3, §4.5 and 4.15)

### **H. Emergency Provisions**

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433.

(Basis: MOP Volume II, Part 3, §4.8)

2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval.

(Basis: MOP Volume II, Part 3, §4.8)

3. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement.

(Basis: MOP Volume II, Part 3, §4.8)

### **I. Severability**

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect.

(Basis: Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

## **I. Standard Conditions (continued)**

### **J. Miscellaneous Conditions**

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301.  
(Basis: Regulation 2-1-301)

## II. EQUIPMENT LIST

### A. Permitted Source List

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

**Table II A – Permitted Sources**

S-#	Description	Make or Type	Model	Capacity
S-201	Gas Turbine (natural gas)	General Electric Company with GE dry low NOx combustors	PG7241 (FA+Enhanced) with DLN 2.6 combustors	1,780 MM BTU/hr (HHV) 159 MW (nominal rating)
S-202	Heat Recovery Steam Generator Duct Burner (natural gas)	Coen with low NOx burner	Unknown	288.9 MM BTU/hr (HHV)
S-203	Auxiliary Steam Boiler A (natural gas)	Foster Wheeler Energy Corporation with low NOx burner	AG-5275	376 MM BTU/hr (HHV) 249,000 lbs/hour steam
S-204	Auxiliary Steam Boiler B (natural gas)	Foster Wheeler Energy Corporation with low NOx burner	AG-5275	376 MM BTU/hr (HHV) 249,000 lbs/hour steam
S-205	Auxiliary Steam Boiler C (natural gas)	Foster Wheeler Energy Corporation with low NOx burner	AG-5275	376 MM BTU/hr (HHV) 249,000 lbs/hour steam



**II. Equipment List (continued)**

**B. Abatement Device List**

**Table II B – Abatement Devices**

<b>A-#</b>	<b>Description</b>	<b>Source(s) Controlled</b>	<b>Applicable Requirement</b>	<b>Operating Parameters</b>	<b>Limit or Efficiency</b>
A-201	Oxidation Catalyst	S-201, S-202	BACT, BAAQMD 2-5	Minimum Operating Temperature of 550 °F	CO ≤ 46.6 lbs/hr, 3 hr avg; ≤ 10 ppmv at 15% O <sub>2</sub> , dry, 3 hr avg
A-202	Selective Catalytic Reduction System	S-201, S-202	BACT	None	NO <sub>x</sub> ≤ 39.2 lbs/hr, 3 hr avg; ≤ 5.0 ppmv at 15% O <sub>2</sub> , dry 3 hr avg; NH <sub>3</sub> ≤ 20 ppmv at 15% O <sub>2</sub> , dry, 3 hr avg
A-203	Oxidation Catalyst	S-203	BACT, BAAQMD 2-5	Minimum Operating Temperature of 430 °F	CO emissions shall not exceed 3.0 lbs/hr avgd over 3 hours nor 11.0 ppmv at 3% O <sub>2</sub> dry basis avgd over 3 hours

**II. Equipment List (continued)**

**B. Abatement Device List (continued)**

**Table II B – Abatement Devices**

<b>A-#</b>	<b>Description</b>	<b>Source(s) Controlled</b>	<b>Applicable Requirement</b>	<b>Operating Parameters</b>	<b>Limit or Efficiency</b>
A-204	Selective Catalytic Reduction System	S-203	BACT	None	NO <sub>x</sub> ≤ 3.7 lbs/hr, 3 hr avg; ≤ 8.2 ppmv at 3% O <sub>2</sub> , dry, 3 hr; NH <sub>3</sub> ≤ 20 ppmv at 3% O <sub>2</sub> , dry, 3 hr avg
A-205	Oxidation Catalyst	S-204	BACT, BAAQMD 2-5	Minimum Operating Temperature of 430 °F	CO ≤ 3.0 lbs/hr, 3 hr avg; ≤ 11.0 ppmv at 3% O <sub>2</sub> , dry, 3 hr avg
A-206	Selective Catalytic Reduction System	S-204	BACT	None	NO <sub>x</sub> ≤ 3.7 lbs/hr, 3 hr avg; ≤ 8.2 ppmv at 3% O <sub>2</sub> , dry, 3 hr; NH <sub>3</sub> ≤ 20 ppmv at 3% O <sub>2</sub> , dry, 3 hr avg
A-207	Oxidation Catalyst	S-205	BACT, BAAQMD 2-5	Minimum Operating Temperature of 430 °F	CO ≤ 3.0 lbs/hr, 3 hr avg; ≤ 11.0 ppmv at 3% O <sub>2</sub> , dry, 3 hr avg

## II. Equipment List (continued)

### B. Abatement Device List (continued)

**Table II B – Abatement Devices**

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-208	Selective Catalytic Reduction System	S-205	BACT	None	NO <sub>x</sub> ≤ 3.7 lbs/hr, 3 hr avg; ≤ 8.2 ppmv at 3% O <sub>2</sub> , dry, 3 hr; NH <sub>3</sub> ≤ 20 ppmv at 3% O <sub>2</sub> , dry, 3 hr avg

### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and State Implementation Plan (SIP) Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. This section also contains provisions that may apply to temporary sources.

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. For BAAQMD regulation(s):  
The date(s) of adoption or most recent amendment of the regulation by the District Board
2. For any federal requirement, including a version of a District regulation that has been approved into the SIP:  
The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of the current SIP requirements is on the EPA Region 9 website. The address is:

<http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>

All other text may be found in the regulations themselves.

**NOTE:**

There are differences between the current BAAQMD rule and the version of the rule in the SIP. For specific information, contact the District's Rule Development Section of the Enforcement Division. All sources must comply with both versions of the rule until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

**Table III  
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (7/19/2006)	N

### III. Generally Applicable Requirements (continued)

**Table III**  
**Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
SIP Regulation 1	General Provisions and Definitions (6/28/1999)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (7/19/2006)	N
SIP Regulation 2, Rule 1	General Requirements (1/26/1999)	Y
BAAQMD Regulation 2, Rule 2	Permits, New Source Review (06/15/2005)	N
SIP Regulation 2, Rule 2	Permits, New Source Review (01/26/1999)	Y
BAAQMD Regulation 2, Rule 3	Permits, Power Plants (12/19/1979)	Y
BAAQMD Regulation 2, Rule 4	Permits, Emissions Banking (12/21/2004)	N
SIP Regulation 2, Rule 4	Permits, Emissions Banking (01/26/1999)	Y
BAAQMD Regulation 2, Rule 5	New Source Review of Toxic Air Contaminants (6/15/2005)	N
BAAQMD Regulation 2, Rule 6	Permits, Major Facility Review (04/16/2003)	N
SIP Regulation 2, Rule 6	Permits, Major Facility Review (06/23/1995)	Y
BAAQMD Regulation 2, Rule 9	Permits, Interchangeable Emission Reduction Credits (6/15/2005)	N
BAAQMD Regulation 3	Fees (06/06/2007)	N
SIP Regulation 3	Fees (05/03/1984)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/1991)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/1990)	Y
BAAQMD Regulation 5	Open Burning (03/06/2002)	N
SIP Regulation 5	Open Burning (9/4/1998)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter (12/05/2007)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/04/1998)	Y
BAAQMD Regulation 7	Odororous Substances (3/17/1982)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/1994)	Y
BAAQMD Regulation 8, Rule 2	Miscellaneous Operations (7/20/2005)	N
SIP Regulation 8, Rule 2	Miscellaneous Operations (03/22/1995)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (11/21/2001)	Y

### III. Generally Applicable Requirements (continued)

**Table III**  
**Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (06/15/2005)	N
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (04/19/2001)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/2005)	N
SIP Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (04/26/1995)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/1995)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/1995)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (07/17/2002)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/2002)	Y
BAAQMD Regulation 9, Rule 1	Sulfur Dioxide (3/15/1995)	N
SIP Regulation 9, Rule 1	Sulfur Dioxide (06/08/1999)	Y
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (10/7/1998)	N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/1990)	N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/02/1981)	Y
California Health and Safety Code Section 41750 et seq.	Portable Equipment	N
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N
California Health and Safety Code Section 93115 et seq.	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	N
40 CFR Part 61, Subpart M	National Emission Standards Hazardous Air Pollutants, Asbestos	Y

### III. Generally Applicable Requirements (continued)

**Table III**  
**Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (03/12/2004)	Y
Subpart F, 40 CFR 82.156	Recycling and Emissions Reductions - Required Practices (04/13/2005)	Y
Subpart F, 40 CFR 82.161	Recycling and Emissions Reductions - Technician Certification (04/13/2005)	Y
Subpart F, 40 CFR 82.166	Recycling and Emissions Reductions - Reporting and Recordkeeping Provisions (04/13/2005)	Y
40 CFR 82, Subpart H	Protection of Stratospheric Ozone; Halon Emissions Reduction (03/05/98)	Y
Title 40 Part 82 Subpart H 82.270(b)	Prohibitions, Halon (03/05/1998)	Y

#### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. For BAAQMD regulation(s):  
 The date(s) of adoption or most recent amendment of the regulation by the District Board
2. For any federal requirement, including a version of a District regulation that has been approved into the SIP:  
 The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of the current SIP requirements is posted on the EPA Region 9 website. The address is:

<http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>.

All other text may be found in the regulations themselves.

**Table IV-A**  
**Source-specific Applicable Requirements**  
**S-201 - GAS TURBINE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (7/19/2006)</b>		
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.8	Continuous Emission Monitoring (Monitors Pursuant to 2-1-403)	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/1999)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Emission Limit Exceedance Reporting Requirements	Y	



#### IV. Applicable Requirements (continued)

**Table IV-A  
 Source-specific Applicable Requirements  
 S-201 - GAS TURBINE**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>BAAQMD Regulation 6, Rule 1</b>	<b>Particulate Matter (12/05/2007)</b>		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-310.3	Heat Transfer Operations	N	
<b>SIP Regulation 6</b>	<b>Particulate Matter and Visible Emissions (9/04/1998)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/1995)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 9</b>	<b>Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/2006)</b>		
9-9-113	Exemption – Inspection/Maintenance	N	
9-9-114	Exemption – Start-Up/Shutdown	N	
9-9-301	Emission Limits, General	N	
9-9-301.1.3	Emission Limits, Turbines greater than 10 MW with SCR, NOx less than 9 ppmv (dry, 15% O2)	N	
9-9-301.2	Emission Limits: Turbines greater than 500 MMBTU/hr, NOx less than 0.15 lb/MWhr or 5ppmv (dry, 15% O2)	N	1/01/2010
9-9-401	Certification, Efficiency	N	
9-9-501	Monitoring and recordkeeping requirements	N	
9-9-601	Determination of Emissions	N	

**IV. Applicable Requirements (continued)**

**Table IV-A  
 Source-specific Applicable Requirements  
 S-201 - GAS TURBINE**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
9-9-602	Determination of Stack Gas Oxygen	Y	
9-9-604	Determination of HHV and LHV	N	
<b>SIP Regulation 9, Rule 9</b>	<b>Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/1997)</b>		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-301	Emission Limits, General	Y	
9-9-301.3	Emission Limits, Turbines greater than 10 MW with SCR, NOx less than 9 ppmv (dry, 15% O2)	Y	
9-9-401	Certification, Efficiency	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
9-9-601	Determination of Emissions	Y	
9-9-604	Determination of HHV and LHV	Y	
<b>BAAQMD Regulation 10, Subpart GG</b>	<b>NSPS Incorporation by Reference, Stationary Gas Turbines (2/16/2000)</b>		
10-40	Subpart GG. Standards of Performance For Stationary Gas Turbines	N	
<b>40 CFR 60 Subpart A</b>	<b>Standards of Performance for New Stationary Sources (5/6/2008)</b>	Y	
<b>60.4(a)</b>	<b>Reports to EPA</b>	Y	
<b>60.4(b)</b>	<b>Reports to District</b>	Y	
<b>60.7(a)</b>	<b>Written notification</b>	Y	
<b>60.7(b)</b>	<b>Records</b>	Y	
<b>60.8</b>	<b>Performance Tests</b>	Y	
<b>60.9</b>	<b>Availability of Information</b>	Y	
<b>60.11(a)</b>	<b>Compliance with standards and maintenance requirements</b>	Y	
<b>60.11(d)</b>	<b>Minimizing emissions</b>	Y	
<b>60.12</b>	<b>Circumvention</b>	Y	
<b>60.13</b>	<b>Monitoring Requirements</b>	Y	
<b>60.19</b>	<b>General notification and reporting requirements</b>	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (2/24/2006)</b>		

#### IV. Applicable Requirements (continued)

**Table IV-A**  
**Source-specific Applicable Requirements**  
**S-201 - GAS TURBINE**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.330(a)	Applicable to Stationary Gas Turbines greater than 10 MM Btu/hr	Y	
60.330(b)	Applicable to Facilities Constructed after October 3, 1977	Y	
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO <sub>2</sub>	Y	
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight	Y	
60.334(c)	NOx CEMs	Y	
60.334(h)(3)	Exemption from sulfur fuel monitoring requirements (Natural Gas)	Y	
60.334(j)(1)(iii)	NOx Excess Emissions and Monitor Downtime reporting requirements	Y	
60.335	Test Methods and Procedures	Y	
<b>BAAQMD Condition #14970</b>			
part 1	Exclusive use of PUC-quality natural gas (Basis: BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 2	Hourly heat input limit for turbine (Basis: cumulative increase)	Y	
part 4	Hourly heat input limit for turbine and HRSG (Basis: PSD for NO <sub>x</sub> )	Y	
part 5	Daily heat input limit for turbine and HRSG (Basis: PSD for PM <sub>10</sub> )	Y	
part 6	Annual heat input limit for turbine and HRSG (Basis: offsets)	Y	
part 8	Oxidizing Catalyst and Selective Catalytic Reduction (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])	Y	
part 9a	Hourly NOx limit (Basis: PSD)	Y	
part 9b	NOx concentration limit (Basis: BACT)	Y	
part 9c	Hourly CO limit (Basis: PSD)	Y	
part 9d	CO concentration limit (Basis: BACT)	Y	
part 9e	Temperature limit for Oxidizing Catalyst (Basis: BAAQMD Reg. 2-5 [Toxics] for formaldehyde, benzene, and PAH's)	Y	
part 9f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	Y	
part 18	Combined daily heat input rate for sources S-201 through S-205 (Basis: PSD, CEC offsets)	Y	

#### IV. Applicable Requirements (continued)

**Table IV-A  
 Source-specific Applicable Requirements  
 S-201 - GAS TURBINE**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 19	Combined annual heat input rate for sources S-201 through S-205 (Basis: Offsets)	Y	
part 20	Combined daily emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	Y	
part 21	Combined annual emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	Y	
part 22	Combined annual emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 23	Continuous monitoring (Basis: BAAQMD Reg. 1-520.1, 9-9-501, BACT, offsets, NSPS, PSD, cumulative increase)	Y	
part 24	Emission calculations (Basis: offsets, PSD, cumulative increase)	Y	
part 25	Ammonia emission calculations (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 26	Toxic air contaminant emission calculations (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 27	Source tests - water content, stack gas, O <sub>2</sub> , POC, PM <sub>10</sub> (Basis: offsets, PSD)	Y	
part 27	Source tests - NH <sub>3</sub> (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 29	Source tests-toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)	Y	
part 31	Records (Basis: BAAQMD Reg. 2-6-501)	Y	
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Y	

#### IV. Applicable Requirements (continued)

**Table IV-B  
 Source-specific Applicable Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions 05/02/2001)</b>		
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NOx, CO <sub>2</sub> or O <sub>2</sub>	Y	
1-520.8	Continuous Emission Monitoring (Monitors Pursuant to 2-1-403)	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-602	Area and Continuous Emission Monitoring Requirements	N	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (SIP-Approved) (10/07/1998)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Emission Limit Exceedance Reporting Requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Parametric Monitoring and Recordkeeping Procedures	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (7/19/2006)</b>		
2-1-501	Monitors	Y	
<b>BAAQMD Regulation 6, Rule 1</b>	<b>Particulate Matter (12/05/2007)</b>		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-304	Tube Cleaning	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-310.3	Heat Transfer Operations	N	
<b>SIP Regulation 6</b>	<b>Particulate Matter and Visible Emissions (9/04/1998)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	

#### IV. Applicable Requirements (continued)

**Table IV-B  
 Source-specific Applicable Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/1995)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 3</b>	<b>Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat Transfer Operations (3/17/1982)</b>		
9-3-303	New or Modified Heat Transfer Operation Limits	N	
9-3-601	Determination of Nitrogen Oxides	N	
<b>BAAQMD Regulation 9, Rule 11</b>	<b>Inorganic Gaseous Pollutants, NOx and CO from Utility Electric Power Gen Boilers (5/17/2000)</b>		
9-11-114	Exemption, Heat Recovery Steam Generators	Y	
<b>BAAQMD Regulation 10, Subpart Da</b>	<b>NSPS Incorporation by Reference, Electric Utility Steam Generating Units (2/16/2000)</b>		
10-3	Subpart Da. Standards of Performance For Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978 (24-hour maximum emissions averaging periods)	N	
<b>40 CFR 60 Subpart A</b>	<b>Standards of Performance for New Stationary Sources (5/6/2008)</b>	Y	
<b>60.4(a)</b>	<b>Reports to EPA</b>	Y	
<b>60.4(b)</b>	<b>Reports to District</b>	Y	
<b>60.7</b>	<b>Notification and record keeping</b>	Y	
<b>60.8</b>	<b>Performance Tests</b>	Y	
<b>60.9</b>	<b>Availability of Information</b>	Y	

#### IV. Applicable Requirements (continued)

**Table IV-B  
 Source-specific Applicable Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.11	Compliance with standards and maintenance requirement	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/13/2007)</b>	Y	
60.40Da(a)	Applicability	Y	
60.42Da(a)(1)	Particulate Limit	Y	
60.42Da(b)	Opacity Limit	Y	
60.43Da(b)(2)	SO <sub>2</sub> limit	Y	
60.43Da(g)	Averaging 30-day rolling average basis	Y	
60.44Da(a)(1)	NO <sub>x</sub> limit	Y	
60.48Da(a)	Compliance, particulate limitation	Y	
60.48Da(b)	Compliance, NO <sub>x</sub> limitation	Y	
60.48Da(c)	Applicability of Limits	Y	
60.49Da(b)	Exemption from SO <sub>2</sub> CEM for natural gas fired units	Y	
60.49Da(o)	Exemption from NO <sub>x</sub> CEM for duct burners	Y	
60.49Da(u)(2)	Exemption from continuous opacity monitoring system requirements	Y	
60.50Da	Compliance determination procedures and methods	Y	
60.51Da(a)	Performance test reports	Y	
<b>BAAQMD Condition #14970</b>			
part 1	Exclusive use of PUC-quality natural gas (Basis: BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 3	Hourly heat input limit for HRSG (Basis: cumulative increase)	Y	
part 4	Hourly heat input limit for turbine and HRSG (Basis: PSD for NO <sub>x</sub> )	Y	
part 5	Daily heat input limit for turbine and HRSG (Basis: PSD for PM <sub>10</sub> )	Y	
part 6	Annual heat input limit for turbine and HRSG (Basis: offsets)	Y	
part 7	Turbine must operate during HRSG operation (Basis: BACT for NO <sub>x</sub> , CO, and POC)	Y	

#### IV. Applicable Requirements (continued)

**Table IV-B  
Source-specific Applicable Requirements  
S-202 – HEAT RECOVERY STEAM GENERATOR**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
part 8	Oxidizing Catalyst and Selective Catalytic Reduction (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])	Y	
part 9a	Hourly NOx limit (Basis: PSD)	Y	
part 9b	NOx concentration limit (Basis: BACT)	Y	
part 9c	Hourly CO limit (Basis: PSD)	Y	
part 9d	CO concentration limit (Basis: BACT)	Y	
part 9e	Temperature limit for Oxidizing Catalyst (Basis: BAAQMD Reg. 2-5 [Toxics] for formaldehyde, benzene, and PAH's)	Y	
part 9f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	Y	
part 18	Combined daily heat input rate for sources S-201 through S-205 (Basis: PSD, CEC offsets)	Y	
part 19	Combined annual heat input rate for sources S-201 through S-205 (Basis: Offsets)	Y	
part 20	Combined daily emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	Y	
part 21	Combined annual emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	Y	
part 22	Combined annual emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 23	Continuous monitoring (Basis: BAAQMD Reg. 1-520.1 and 9-9-501, BACT, offsets, NSPS, PSD, cumulative increase)	Y	
part 24	Emission calculations (Basis: offsets, PSD, cumulative increase)	Y	
part 25	Ammonia emission calculations or source test (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 26	Toxic air contaminant emission calculations (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 27	Source tests - water content, stack gas, O <sub>2</sub> , POC, PM <sub>10</sub> (Basis: offsets, PSD)	Y	
part 27	Source tests - NH <sub>3</sub> (Basis: BAAQMD Reg. 2-5 [Toxics])	N	



#### IV. Applicable Requirements (continued)

**Table IV-B  
 Source-specific Applicable Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 29	Source tests - toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)	Y	
part 31	Records (Basis: BAAQMD Reg. 2-6-501)	Y	
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Y	

**Table IV-C  
 Source-specific Applicable Requirements  
 S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (7/19/2006)</b>		
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NO <sub>x</sub> , CO <sub>2</sub> or O <sub>2</sub>	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-523	Parametric Monitoring and Recordkeeping Procedures	N	
1-602	Area and Continuous Emission Monitoring Requirements	N	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Parametric Monitoring and Recordkeeping Procedures	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (7/19/2006)</b>		
2-1-501	Monitors	Y	

#### IV. Applicable Requirements (continued)

**Table IV-C  
 Source-specific Applicable Requirements  
 S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 6, Rule 1</b>	<b>Particulate Matter (12/05/2007)</b>		
6-1-301	Ringelmann Number 1 Limitation	N	
6-1-304	Tube Cleaning	N	
6-1-305	Visible Particles	N	
6-1-310	Particulate Weight Limitation	N	
6-1-310.3	Heat Transfer Operations	N	
<b>SIP Regulation 6</b>	<b>Particulate Matter and Visible Emissions (9/04/1998)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/1995)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 3</b>	<b>Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat Transfer Operations (3/17/1982)</b>		
9-3-303	New or Modified Heat Transfer Operation Limits	N	
<b>BAAQMD Regulation 9, Rule 7</b>	<b>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (7/30/2008)</b>		
9-7-117	Exemption from emission limits in 9-7-307.6: Greater than 75 MMBTU/hr limited to 9 ppmv NOx prior to July 30, 2008	N	
9-7-301	Interim Emission Limits	N	
9-7-301.1	Emission Limits-NOx less than 30 ppmv (dry, 3% O2)	N	
9-7-301.4	Emission Limits-CO less than 400 ppmv (dry, 3% O2)	N	
9-7-311	Insulation requirements	N	1/01/2010

#### IV. Applicable Requirements (continued)

**Table IV-C  
 Source-specific Applicable Requirements  
 S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
9-7-312	Stack Gas Temperature Limits	N	1/1/2011
9-7-313	Tune-up Requirements	N	1/01/2009
9-7-503	Records	N	
9-7-503.1	Records – tune-ups	N	
9-7-503.4	Records – source tests	N	
9-7-604	Tune-Up Procedures	N	
<b>SIP Regulation 9, Rule 7</b>	<b>Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (12/15/1997)</b>		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits, Gaseous Fuel-NOx less than 30 ppmv (dry, 3% O2)	Y	
9-7-301.2	Emission Limits-CO less than 400 ppmv (dry, 3% O2)	Y	
9-7-503	Records	Y	
9-7-503.4	Records – source tests	Y	
<b>BAAQMD Regulation 10, Subpart Db</b>	<b>NSPS Incorporation by Reference, Fossil-Fuel-Fired Steam Generators (12/20/1995)</b>		
10-4	Subpart Db. Standards of Performance For Industrial-Commercial-Institutional Steam Generating Units (24-hour maximum emissions averaging periods)	N	
<b>BAAQMD Regulation 11, Rule 1</b>	<b>Hazardous Pollutants, Lead (3/17/1982)</b>		
11-1-301	Daily Limitation	Y	
11-1-302	Ground level Concentration Limit Without Background	Y	
<b>40 CFR 60</b>	<b>Standards of Performance for New Stationary Sources (5/6/2008)</b>	Y	
<b>Subpart A</b>	<b>General Provisions</b>	Y	
60.4(a)	Reports to EPA	Y	
60.4(b)	Reports to District	Y	

#### IV. Applicable Requirements (continued)

**Table IV-C**  
**Source-specific Applicable Requirements**  
**S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.7	Notification and record keeping	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11	Compliance with standards and maintenance requirement	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
<b>Subpart Db</b>	<b>Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (6/13/2007)</b>	<b>Y</b>	
60.40b(a)	Applicability	Y	
60.44b	NOX limit	Y	
(a)(1)(i)			
60.44b(h)	NOx limit applicable at all times	Y	
60.44b(i)	Compliance: 30-day rolling average basis	Y	
60.46b(a)	NOx limit applicable at all times	Y	
60.46b(c)	Compliance with NOX limit	Y	
60.46b(e)	Performance test for NOX	Y	
60.46b(e)(1)	Performance test for NOX	Y	
60.48b(b)(1)	NOx CEM	Y	
60.48b(f)	Standby Monitoring	Y	
60.49b(a)	Notification of Initial Startup	Y	
60.49b(b)	Report Performance Tests and CEM performance	Y	
60.49b(d)	Fuel records	Y	
60.49b(g)	Records for each day of operation	Y	
60.49b(h)(2)	Excess emission reports	Y	
60.49b(i)	Submittal of records	Y	
60.49b(o)	Records retention for two years	Y	
<b>BAAQMD Condition #14970</b>			
Part 10	Exclusive use of natural gas (Basis: BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 11	Hourly heat input limit for each boiler (Basis: cumulative increase)	Y	

#### IV. Applicable Requirements (continued)

**Table IV-C**  
**Source-specific Applicable Requirements**  
**S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
part 12	Total daily heat input limit for S-203 to S-205, Boilers (Basis: PSD for PM <sub>10</sub> )	Y	
part 13	Total annual heat input limit for S-203 to S-205, Boilers (Basis: offsets)	Y	
part 14	Oxidizing Catalyst and Selective Catalytic Reduction for S-203 (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])	Y	
part 15	Oxidizing Catalyst and Selective Catalytic Reduction for S-204 (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])	Y	
part 16	Oxidizing Catalyst and Selective Catalytic Reduction for S-205 (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])	Y	
part 17a	Hourly NOx limits (Basis: PSD)	Y	
part 17b	NOx concentration limits (Basis: BACT)	Y	
part 17c	Hourly CO limit (Basis: PSD)	Y	
part 17d	CO concentration limit (Basis: BACT)	Y	
part 17e	Temperature limit for Oxidizing Catalyst (Basis: Reg. 2-5 [Toxics] for formaldehyde, benzene, and PAH's)	Y	
part 17f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	Y	
part 18	Combined daily heat input rate for sources S-201 to S-205 (Basis: PSD, CEC offsets)	Y	
part 19	Combined annual heat input rate for sources S-201 to S-205 (Basis: offsets)	Y	
part 20	Combined daily emissions limits for sources S-201 to S-205 (Basis: CEC offsets, cumulative increase, PSD)	Y	
part 21	Combined annual emissions limits for sources S-201 to S-205 (Basis: offsets, PSD, cumulative increase)	Y	
part 22	Combined annual emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 23	Continuous monitoring (Basis: BAAQMD Reg. 1-520.1 and 9-9-501, BACT, offsets, NSPS, PSD, cumulative increase)	Y	
part 24	Emission calculations (Basis: offsets, PSD, cumulative increase)	Y	

#### IV. Applicable Requirements (continued)

**Table IV-C**  
**Source-specific Applicable Requirements**  
**S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 25	Ammonia emission calculations or source test (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 26	Toxic air contaminant emission calculations (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 28	Source tests - water content, stack gas, O <sub>2</sub> , POC, PM <sub>10</sub> (Basis: offsets for POC, PSD for PM <sub>10</sub> )	Y	
part 28	Source tests - NH <sub>3</sub> (Basis: BAAQMD Reg. 2-5 [Toxics])	N	
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)	Y	
part 31	Records (Basis: BAAQMD Reg. 2-6-501)	Y	
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Y	

## V. SCHEDULE OF COMPLIANCE

The permit holder shall continue to comply with all applicable requirements cited in this permit. The permit holder shall also comply on a timely basis with applicable requirements that become effective during the term of this permit.

## VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk (\*) is not federally enforceable.

### Condition #14970

Permit Conditions for Plant #8664:

Crockett Cogeneration, A California Limited Partnership;  
Including: S-201, S-202, S-203, S-204, and S-205

The following definitions shall apply to all permit conditions listed below.

### Definitions:

*Clock Hour:* Any continuous 60-minute period beginning on the hour.

*Calendar Day:* Any continuous 24-hour period beginning at 12:00 AM or 0000 hours.

*Calendar Year:* A period of time from January 1 at 12:00 AM through and including December 31 at 11:59 PM.

*Heat Input:* All heat inputs refer to the heat input at the higher heating value (HHV) of the fuel.

*Rolling 3-hour period:* Any three-hour period that begins on the hour and does not include startup or shutdown periods.

*Firing Hours:* Period of time during which fuel is flowing to a unit, measured in fifteen-minute increments.

*Gas Turbine Startup:* The first 120 minutes of continuous fuel flow to the Gas Turbine after fuel flow is first initiated; or the amount of time from Gas Turbine fuel flow initiation until the requirements listed in Conditions #9.a. through #9.e. are met, whichever is less.

*Gas Turbine Shutdown:* The last 60 minutes before fuel flow to the Gas Turbine is terminated; or the amount of time from noncompliance with any requirement listed in Conditions #9.a. through #9.e. until fuel flow termination, whichever is less.

*Auxiliary Boiler Startup:* The first 120 minutes of continuous fuel flow to an Auxiliary Boiler after fuel flow is first initiated; or the amount of time from Boiler fuel flow initiation until the requirements listed in Conditions #17.a. through #17.e. are met, whichever is less.

*Auxiliary Boiler Shutdown:* The last 60 minutes before fuel flow to an Auxiliary Boiler is terminated; or the amount of time from noncompliance with any requirement listed in Conditions #17.a. through #17.e. until fuel flow termination, whichever is less.

*Specified PAH's:* The polycyclic aromatic hydrocarbons listed below shall be considered to be

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

Specified PAH's for these permit conditions. Any emission limits for Specified PAH's refer to the sum of the emissions for all six of the following compounds.

Benzo[a]anthracene  
Benzo[b]fluoranthene  
Benzo[k]fluoranthene  
Benzo[a]pyrene  
Dibenzo[a,h]anthracene  
Indeno[1,2,3-cd]pyrene

*Corrected Concentration:* The concentration of any pollutant (generally NO<sub>x</sub>, CO, or NH<sub>3</sub>) corrected to a specific stack gas oxygen concentration. For P-201 from the Gas Turbine and the HRSG the specific stack gas oxygen concentration is 15% O<sub>2</sub> by volume on a dry basis. For P-202, P-203, and P-204 from the Auxiliary Boilers, the specific stack gas oxygen concentration is 3% O<sub>2</sub> by volume on a dry basis.

#### *Conditions for the Gas Turbine (S-201) and the Heat Recovery Steam Generator (S-202)*

1. The owner/operator shall fire S-201 Gas Turbine and S-202 Heat Recovery Steam Generator (HRSG) on PUC quality natural gas exclusively.  
(Basis: BACT for SO<sub>2</sub> and PM<sub>10</sub>)
2. The owner/operator shall limit the heat input rate to the Gas Turbine to no more than 1,780 million BTU per hour, averaged over any rolling 3-hour period.  
(Basis: Cumulative Increase)
3. The owner/operator shall limit the heat input rate to the HRSG to no more than 288.9 million BTU per hour, averaged over any rolling 3-hour period.  
(Basis: Cumulative Increase)
4. The owner/operator shall limit the combined heat input rate to the Gas Turbine and HRSG to no more than 2,129 million BTU per hour, averaged over any rolling 3-hour period.  
(Basis: PSD for NO<sub>x</sub>)
5. The owner/operator shall limit the combined heat input rate to the Gas Turbine and HRSG to no more than 51,096 million BTU per calendar day.  
(Basis: PSD for PM<sub>10</sub>)
6. The owner/operator shall limit the combined heat input rate to the Gas Turbine and HRSG to no more than 15,613,000 million BTU per calendar year.  
(Basis: Offsets)



## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

7. The owner/operator shall not operate the HRSG unless the Gas Turbine is operating.  
(Basis: BACT for NO<sub>x</sub>, CO, POC)
8. The owner/operator shall abate the Gas Turbine and HRSG with the properly operated and properly maintained Oxidizing Catalyst (A-201) and Selective Catalytic Reduction System (A-202), used in series.  
(Basis: BACT and BAAQMD Regulation 2 Rule 5 [Toxics])
9. The owner/operator of the S-201 Gas Turbine and S-202 HRSG shall meet all of the requirements listed in a. through f. below, except during a Gas Turbine Startup or a Gas Turbine Shutdown.  
(Basis: BACT, BAAQMD Regulation 2 Rule 5 [Toxics], and PSD)
  - a. Nitrogen oxide emissions at P-201 (the combined exhaust point for the S-201 Gas Turbine and the S-202 HRSG after control by the A-201 and A-202 Catalysts) shall not exceed 39.2 pounds per hour, calculated as NO<sub>2</sub> and averaged over any rolling 3- hour period.  
(Basis: PSD for NO<sub>x</sub>)
  - b. The nitrogen oxide concentration at P-201 shall not exceed 5.0 ppmv, corrected to 15% oxygen on a dry basis, and averaged over any rolling 3-hour period.  
(Basis: BACT for NO<sub>x</sub>)
  - c. Carbon monoxide emissions at P-201 shall not exceed 46.6 pounds per hour, averaged over any rolling 3-hour period.  
(Basis: PSD for CO)
  - d. The carbon monoxide concentration at P-201 shall not exceed 10 ppmv, corrected to 15% oxygen on a dry basis and averaged over any rolling 3-hour period.  
(Basis: BACT for CO)
  - e. The temperature of the A-201 Oxidizing Catalyst shall be maintained at a minimum of 550 degrees Fahrenheit.  
(Basis: BAAQMD Regulation 2, Rule 5 [Toxics] for formaldehyde, benzene, and PAH's)
  - f. Ammonia (NH<sub>3</sub>) emissions at P-201 shall not exceed 20 ppmv, corrected to 15% oxygen on a dry basis and averaged over any rolling 3-hour period.  
(Basis: BAAQMD Regulation 2, Rule 5 [Toxics] for NH<sub>3</sub>)

## **VI. Permit Conditions (continued)**

### **A. Source-Specific Permit Conditions (continued)**

#### ***Conditions for the Auxiliary Boilers (S-203, S-204, and S-205)***

10. The owner/operator shall fire the Auxiliary Boilers (S-203, S-204, and S-205) on natural gas exclusively.  
(Basis: BACT for SO<sub>2</sub> and PM<sub>10</sub>)
11. The owner/operator shall limit the heat input rate to each Auxiliary Boiler (S-203, S-204, or S-205) to no more than 376 million BTU per hour, averaged over any rolling 3-hour period.  
(Basis: Cumulative Increase)
12. The owner/operator shall limit the combined heat input rate to the Auxiliary Boilers (S-203, S-204, and S-205) to no more than 18,048 million BTU per calendar day.  
(Basis: PSD for PM<sub>10</sub>)
13. The owner/operator shall limit the combined heat input rate to the Auxiliary Boilers (S-203, S-204, and S-205) to no more than 6,575,000 million BTU per calendar year.  
(Basis: Offsets)
14. The owner/operator shall abate the S-203 Auxiliary Boiler with the properly operated and properly maintained Oxidizing Catalyst (A-203) and Selective Catalytic Reduction System (A-204), used in series.  
(Basis: BACT and BAAQMD Regulation 2, Rule 5 [Toxics])
15. The owner/operator shall abate the S-204 Auxiliary Boiler with the properly operated and properly maintained Oxidizing Catalyst (A-205) and Selective Catalytic Reduction System (A-206), used in series.  
(Basis: BACT and BAAQMD Regulation 2, Rule 5 [Toxics])
16. The owner/operator shall abate the S-205 Auxiliary Boiler with the properly operated and properly maintained Oxidizing Catalyst (A-207) and Selective Catalytic Reduction System (A-208), used in series.  
(Basis: BACT and BAAQMD Regulation 2, Rule 5 [Toxics])
17. The owner/operator of the Auxiliary Boilers (S-203, S-204, and S-205) shall meet all of the requirements listed in a. through f. below, except during an Auxiliary Boiler Startup or an Auxiliary Boiler Shutdown.  
(Basis: BACT, BAAQMD Regulation 2 Rule 5 [Toxics], and PSD)
  - a. Nitrogen oxide emissions at P-202, P-203, or P-204 (the exhaust point for each Auxiliary Boiler after control by the Oxidizing Catalyst and SCR Catalyst) shall not

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

exceed 3.7 pounds per hour, calculated as NO<sub>2</sub> and averaged over any rolling 3- hour period.

(Basis: PSD for NO<sub>x</sub>)

- b. The nitrogen oxide concentration at P-202, P-203, or P-204 shall not exceed 8.2 ppmv, corrected to 3% oxygen on a dry basis, and averaged over any rolling 3-hour period.  
(Basis: BACT for NO<sub>x</sub>)
- c. Carbon monoxide emissions at P-202, P-203, or P-204 shall not exceed 3.0 pounds per hour, averaged over any rolling 3-hour period.  
(Basis: PSD for CO)
- d. The carbon monoxide concentration at P-202, P-203, or P-204 shall not exceed 11.0 ppmv, corrected to 3% oxygen on a dry basis and averaged over any rolling 3-hour period.  
(Basis: BACT for CO)
- e. The temperature of the Oxidizing Catalysts (A-203, A-205, and A-207) shall be maintained at a minimum of 430 degrees Fahrenheit.  
(Basis: BAAQMD Regulation 2 Rule 5 [Toxics] for formaldehyde, benzene, and PAH's)
- f. Ammonia (NH<sub>3</sub>) emissions at P-202, P-203, or P-204 shall not exceed 20 ppmv, corrected to 3% oxygen on a dry basis and averaged over any rolling 3-hour period.  
(Basis: BAAQMD Regulation 2, Rule 5 [Toxics] for NH<sub>3</sub>)

### *Conditions for All Sources Combined (S-201, S-202, S-203, S- 204, and S-205)*

- 18. The owner/operator shall limit the combined heat input rate to the Gas Turbine (S-201), HRSG (S-202), and Auxiliary Boilers (S-203, S-204, and S-205) to no more than 57,544 million BTU per calendar day.  
(Basis: PSD, CEC Offsets)
- 19. The owner/operator shall limit the combined heat input rate to the Gas Turbine (S-201), HRSG (S-202), and Auxiliary Boilers (S-203, S-204, and S-205) to no more than 19,023,000 million BTU per calendar year.  
(Basis: Offsets)
- 20. The owner/operator shall limit the emissions from the Gas Turbine, HRSG, and three Auxiliary Boilers combined (S-201, S-202, S-203, S-204, and S-205), including emissions

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

generated during Gas Turbine Startups, Gas Turbine Shutdowns, Auxiliary Boiler Startups, and Auxiliary Boiler Shutdowns, to no more than the following limits during any calendar day:

- a. 969.7 pounds of NO<sub>x</sub> (as NO<sub>2</sub>) per day  
(Basis: CEC Offsets)
  - b. 745.0 pounds of CO per day  
(Basis: Cumulative Increase)
  - c. 352.6 pounds of POC (as CH<sub>4</sub>, methane) per day  
(Basis: CEC Offsets)
  - d. 329.1 pounds of PM<sub>10</sub> per day  
(Basis: PSD)
  - e. 48.5 pounds of SO<sub>2</sub> per day  
(Basis: Cumulative Increase)
21. The owner/operator shall limit the emissions from the Gas Turbine, HRSG, and three Auxiliary Boilers combined (S-201, S-202, S-203, S-204, and S-205), including emissions generated during Gas Turbine Startups, Gas Turbine Shutdowns, Auxiliary Boiler Startups, and Auxiliary Boiler Shutdowns, to no more than the following limits during any calendar year:
- a. 160.85 tons of NO<sub>x</sub> (as NO<sub>2</sub>) per year  
(Basis: Offsets, PSD)
  - b. 73.27 tons of CO per year  
(Basis: Cumulative Increase)
  - c. 48.45 tons of POC (as CH<sub>4</sub>, methane) per year  
(Basis: Offsets)
  - d. 58.19 tons of PM<sub>10</sub> per year  
(Basis: PSD)
  - e. 8.01 tons of SO<sub>2</sub> per year  
(Basis: Cumulative Increase)
22. \*The owner/operator shall ensure maximum annual emissions from the Gas Turbine, HRSG, and three Auxiliary Boilers combined (S-201, S-202, S-203, S-204, and S-205) do not exceed the following limits:
- a. 4318.6 pounds of formaldehyde per year
  - b. 116.1 pounds of benzene per year
  - c. 78.7 pounds of Specified PAH's per year

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

during any calendar year, unless the owner/operator meets the requirements of (d), (e), and (f) below:

- d. The owner/operator shall perform a risk analysis using the emission rates determined by source test and the most current District approved procedures and unit risk factors in effect at the time of the analysis. The cancer risk calculated by this first analysis shall not exceed either 4 in one million or the maximum allowable risk (considering the use of TBACT) under the Risk Management Policy in effect at the time of the analysis, whichever is greater.
- e. The owner/operator shall perform a second risk analysis using the emission rates determined by source test and the procedures and unit risk factors in effect when the Determination of Compliance was issued. The cancer risk calculated from this second risk analysis shall not exceed 4 in one million.
- f. Both of these risk analyses shall be submitted to the District within 60 days of the source test date. The owner/operator may request in this submittal that the District revise the carcinogenic compound emission limits specified above. If the owner/operator demonstrates to the satisfaction of the APCO that these revised emission limits will satisfy the conditions stated in parts d. and e. above, the District may then (at the discretion of the APCO) adjust the carcinogenic compound emission limits listed above.

(Basis: BAAQMD Regulation 2 Rule 5 [Toxics])

23. The owner/operator shall demonstrate compliance with Conditions #2-#8, #9.a.-#9.e., #11-#16, #17.a.-#17.e., #18, #19, #20.a., #20.b., #21.a., and #21.b. by using properly operated and properly maintained continuous monitors (during all hours of operation including equipment Startup and Shutdown periods) for all of the following parameters:
- a. Firing Hours and Fuel Flow Rates at each of the following sources:  
S-201, S-202, S-203, S-204, and S-205.
  - b. Oxygen (O<sub>2</sub>) Concentrations, Nitrogen Oxides (NO<sub>x</sub>) Concentrations, and Carbon Monoxide (CO) Concentrations at each of the following stacks: P-201, P-202, P-203, and P-204.
  - c. Inlet Temperatures at each of the following abatement devices: A-201, A-203, A-205, and A-207.

The owner/operator shall record all of the above parameters every 15 minutes (excluding normal calibration periods) and shall summarize all of the above parameters for each clock hour. For each calendar day, the owner/operator shall calculate and record the total Firing Hours and the average hourly Fuel Flow Rates, Concentrations, and Temperatures.

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

The owner/operator shall use the parameters measured above and District approved calculation methods to calculate the following parameters:

- d. Heat Input Rate at each of the following sources:
  - S-201, S-202, S-203, S-204, and S-205.
- e. Corrected NO<sub>x</sub> Concentrations, NO<sub>x</sub> Emissions measured as NO<sub>2</sub>, Corrected CO Concentrations, and CO Emissions at each of the following stacks: P-201, P-202, P-203, and P-204.

For each source or stack, the owner/operator shall record the above parameters (23.d. and 23.e.) every 15 minutes (excluding normal calibration periods). For each source, the owner/operator shall calculate and record the total Heat Input Rate for every clock hour and the average hourly Heat Input Rate for every rolling 3-hour period. For each calendar day, the owner/operator shall calculate and record, on an hourly basis, the cumulative total Heat Input Rate since 12:00 AM for: each source; the Gas Turbine and the HRSG Combined; the three Auxiliary Boilers Combined; and all five sources (S-201, S-202, S-203, S-204, and S-205) combined. The owner/operator shall calculate and record the average NO<sub>x</sub> Emissions, CO Emissions, and Corrected NO<sub>x</sub> and CO Concentrations for every clock hour and for every rolling 3-hour period. For each calendar day, the owner/operator shall calculate and record, on an hourly basis, the cumulative total NO<sub>x</sub> Emissions and cumulative total CO Emissions, since 12:00 AM, for: each source; the Gas Turbine and the HRSG Combined; the three Auxiliary Boilers Combined; and all five sources (S-201, S-202, S-203, S-204, and S-205) combined. For each calendar day, the owner/operator shall calculate and record the average hourly: Heat Input Rates, Corrected NO<sub>x</sub> Concentrations, NO<sub>x</sub> Emissions, Corrected CO Concentrations, and CO Emissions; for each source. For each calendar year, the owner/operator shall calculate and record, on a daily basis, the cumulative total NO<sub>x</sub> Emissions and cumulative total CO Emissions, since January 1 at 12:00 AM, for all five sources (S-201, S-202, S-203, S-204, and S-205) combined.

(Basis: 1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)

- 24. In order to demonstrate compliance with Conditions #20.c.-#20.e. and #21.c.-#21.e., the owner/operator shall calculate (on a daily basis): the Precursor Organic Compound (POC) Emissions, Fine Particulate Matter (PM<sub>10</sub>) Emissions, and Sulfur Dioxide (SO<sub>2</sub>) Emissions; from each source. The owner/operator shall use the actual Heat Input Rates calculated for Condition #23, actual Gas Turbine Startup Times, actual Gas Turbine Shutdown Times, and District approved emission factors to calculate these emissions. For each calendar day, POC, PM<sub>10</sub>, and SO<sub>2</sub> Emissions shall be summarized for: the Gas Turbine and HRSG combined; the three Auxiliary Boilers Combined; and the five sources (S-201, S-202, S-203, S-204, and S-205) combined. For each calendar year, the owner/operator shall calculate and record (on a daily basis) the cumulative total POC, PM<sub>10</sub>, and SO<sub>2</sub> Emissions, since January 1 at 12:00 AM, for all five sources (S-201, S-202, S-203, S-204, and S-205) combined.

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

(Basis: Offsets, PSD, Cumulative Increase)

25. \*In order to demonstrate compliance with Conditions #9.f. and 17.f., the owner/operator shall determine the Corrected Ammonia (NH<sub>3</sub>) Concentration and NH<sub>3</sub> Emissions in a stack (P-201, P-203, P-204, or P-205) using either District approved emission calculation methods or District approved source test methods. Ammonia Concentration and Emissions shall be calculated and recorded for any hours that the owner/operator suspects that ammonia concentration may have exceeded the limits in 9.f. or 17.f. In addition, District staff may, at any time, request the owner/operator to calculate Ammonia Concentration and Emissions to verify compliance with Conditions #9.f. and #17.f.

(Basis: BAAQMD Regulation 2 Rule 5 [Toxics])

26. \*In order to demonstrate compliance with Condition #22, the owner/operator shall calculate and record on an annual basis the maximum projected annual emissions of: Formaldehyde, Benzene, and Specified PAH's. Maximum projected annual emissions shall be calculated using the maximum Heat Input Rate of 19,023,000 MM BTU/year and the highest emission factor (pounds of pollutant per MM BTU of Heat Input) determined by any source test at the Gas Turbine, HRSG, or Auxiliary Boilers.

(Basis: BAAQMD Regulation 2 Rule 5 [Toxics])

27. In order to demonstrate compliance with Conditions #9, #20, and #23, the owner/operator shall conduct, on an annual basis, a District approved source test on stack P-201 while the S-201 Gas Turbine and S-202 Heat Recovery Generator are operating at maximum allowable operating rates. The owner/operator shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and emissions, particulate matter (PM<sub>10</sub>) emissions, and ammonia concentration. The owner/operator shall also meet all applicable testing requirements specified in Volume V of the District's Manual of Procedures for continuous emissions monitors. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall notify the District's Source Test Section in writing of the source test protocols and projected test dates at least 7 days before the test is to begin.

Source test results shall be submitted to the District within 30 days of conducting the tests.

(Basis: Offsets for POC, PSD for PM<sub>10</sub>, BAAQMD Regulation 2 Rule 5 [Toxics]for NH<sub>3</sub>)

28. In order to demonstrate compliance with Conditions #17, #20, and #23, the owner/operator shall conduct, on an annual basis, a District approved source test on either stack P-202, P-203, or P-204 while the associated Auxiliary Boiler (S-203, S-204, or S-205) is operating at maximum allowable operating rates. The owner/operator shall ensure that each Auxiliary Boiler is tested at least once every five years. The owner/operator shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic

## VI. Permit Conditions (continued)

### A. Source-Specific Permit Conditions (continued)

compound concentration and emissions, particulate matter (PM10) emissions, and ammonia concentration. The owner/operator shall also meet all applicable testing requirements specified in Volume V of the District's Manual of Procedures for continuous emissions monitors. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall notify the District's Source Test Section in writing of the source test protocols and projected test dates at least 7 days before the test is to begin. Source test results shall be submitted to the District within 30 days of conducting the tests.

(Basis: Offsets for POC, PSD for PM10, BAAQMD Regulation 2 Rule 5 [Toxics] for NH3)

29. \*In order to demonstrate compliance with Conditions #22 and #25, the owner/operator shall conduct, on a biennial basis, an approved source test on stack P-201 while the S-201 Gas Turbine and S-202 Heat Recovery Steam Generator are operating at maximum allowable operating rates. Unless the requirements of 29.b. have been met, the owner/operator shall determine the formaldehyde, benzene, and Specified PAH emission rates (in pounds/MM BTU). If any of the above pollutants are not detected (below the analytical detection limit), the emission concentration for that pollutant shall be deemed to be one half (50%) of the detection limit concentration.

(Basis: BAAQMD Regulation 2 Rule 5 [Toxics])

- a. The owner/operator shall calculate the maximum projected annual emission rate for each pollutant by multiplying the pollutant emission rate (pounds/MM BTU) determined from the source test by 19,023,000 MM BTU/year.
- b. If three consecutive biennial source tests demonstrate that the emission rates for benzene and total Specified PAH's are less than the maximum projected annual emission rates shown below, then the owner/operator may discontinue future testing for that pollutant:

Benzene < or = 80.0 pounds/year  
Specified PAH's < or = 7.0 pounds/year

30. The owner/operator shall submit all reports (such as: monthly CEM reports, monitor breakdown reports, emission excess reports, equipment breakdown reports, etc.) as required by District Rules or Regulations and in accordance with all procedures and time limits specified in the Rule, Regulation, Manual of Procedures, or Enforcement Division Policies & Procedures Manual.

(Basis: BAAQMD Regulation 2-6-502)

31. The owner/operator shall maintain all records and reports on site for a minimum of 5 years. These records shall include but are not limited to: continuous monitoring records (firing hours, fuel flows, emissions, temperatures, monitor excesses, breakdowns, etc.), source test



## **VI. Permit Conditions (continued)**

### **A. Source-Specific Permit Conditions (continued)**

and analytical records, emission calculation records, records of plant upsets and related incidents. The owner/operator shall make all records and reports available to District staff upon request.

(Basis: BAAQMD Regulation 2-6-501)

32. The owner/operator shall notify the District of any violations of these Permit Conditions. Notification shall be submitted within a timely manner and in accordance with all applicable District Rules, Regulations, and the Manual of Procedures. If the notification and reporting requirements for a particular permit condition violation are not explicitly described in a District Rule, Regulation, or the Manual of Procedures, the owner/operator shall submit written notification (facsimile is acceptable) to the Enforcement Division no more than 96 hours after the first occurrence of the violation.

(Basis: BAAQMD Regulation 1-522-7)

## VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

This section is a summary of the limits and monitoring. In the case of a conflict between Sections I-VI and Section VII, the preceding sections (I-VI) take precedence.

**Table VII-A  
 Applicable Limits and Compliance Monitoring Requirements  
 S-201 - GAS TURBINE**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C	CEM
	NSPS, 40 CFR 60.332 (a)(1)	Y		155.2 ppmv, @ 15% O2, dry	NSPS, 40 CFR 60.334(c)	C	CEM
	BAAQMD condition #14970, part 9a	Y		39.2 lb/hr , for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, part 9b	Y		5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, part 20a	Y		969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-A  
 Applicable Limits and Compliance Monitoring Requirements  
 S-201 - GAS TURBINE**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOX	BAAQMD condition #14970, part 21a	Y		160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
CO	BAAQMD condition #14970, part 9c	Y		46.6 lb/hr, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, Part 9d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, Part 20b	Y		745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, part 21b	Y		73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-A  
 Applicable Limits and Compliance Monitoring Requirements  
 S-201 - GAS TURBINE**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Exempt from monitoring requirement per NSPS 40 CFR 60.334(h)(3) for PUC quality natural gas.	N	
	BAAQMD condition #14970, part 20e	Y		48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 21e	Y		8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1 for no more than 3 min/hr		N	
Filterable Particulate	BAAQMD 6-1-310	Y		0.15 grain/dscf @ 6% O <sub>2</sub>		N	
PM10	BAAQMD condition #14970, Part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A	Source test

## VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

**Table VII-A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-201 - GAS TURBINE**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, part 21d	Y		58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
POC	BAAQMD condition #14970, part 20c	Y		352.6 lb/day (as CH <sub>4</sub> ) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 20c	Y		352.6 lb/day (as CH <sub>4</sub> ) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A	Source test
	BAAQMD condition #14970, Part 21c	Y		48.45 ton/yr (as CH <sub>4</sub> ) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
NH <sub>3</sub>	BAAQMD condition #14970, Part 9f	N		20 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 25	P/E	Calculations or source test
	BAAQMD condition #14970, Part 9f	N		20 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 27	P/A	Source test
Formaldehyde	BAAQMD condition #14970, part 22a	N		4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations

## VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

**Table VII-A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-201 - GAS TURBINE**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, Part 22a	N		4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/every 2 years	Source Test
Benzene	BAAQMD condition #14970, part 22b	N		116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations
Benzene	BAAQMD condition #14970, Part 22b	N		116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/every 2 years	Source Test
Specified PAH's	BAAQMD condition #14970, Part 22c	N		78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations
	BAAQMD condition #14970, Part 22c	N		78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/every 2 years	Source Test
Heat input limit	BAAQMD condition #14970, part 2	Y		1,780 mmbtu/hr, 3-hr average	BAAQMD condition #14970, part 23	C	fuel meter, calculations
	BAAQMD condition #14970, part 4	Y		2,129 mmbtu/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	fuel meter, calculations

## VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

**Table VII-A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-201 - GAS TURBINE**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, part 5	Y		51,029 mmbtu/day for turbine and HRSG combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
	BAAQMD condition #14970, part 6	Y		15,613,000 mmbtu/yr for turbine and HRSG combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
	BAAQMD condition #14970, part 18	Y		57,544 mmbtu/day, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
Heat input limit	BAAQMD condition #14970, Part 19	Y		19,023,000 mmbtu/yr, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
Oxidizing catalyst temp	BAAQMD condition #14970, part 9e	Y		550 degrees Fahrenheit	BAAQMD condition #14970, part 23	C	temperature monitor

<sup>1</sup> Ground Level Concentration

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-B  
 Applicable Limits and Compliance Monitoring Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOX	BAAQMD 9-3-303	N		125 ppm	BAAQMD 1-520.1	C	CEM
	NSPS 40 CFR 60.44Da (a)(1)	Y		0.2 lb/mmbtu except during startup, shutdown, or malfunction	Exempt from CEMS per NSPS 40 CFR 60.49Da(o)	N	
	BAAQMD condition #14970, part 9a	Y		39.2 lb/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
NOX	BAAQMD condition #14970, Part 9b	Y		5.0 ppmv @ 15% O <sub>2</sub> , for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, Part 20a	Y		969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, Part 21a	Y		160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
CO	BAAQMD condition #14970, Part 9c			46.6 lb/hr, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, Part 9d			10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	CEM



**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-B  
 Applicable Limits and Compliance Monitoring Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, Part 20b	Y		745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
	BAAQMD condition #14970, part 21b	Y		73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	CEM
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
SO <sub>2</sub>	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
	NSPS 40 CFR 60.43Da (b)(2)			0.2 lb/mmbtu, 24 hr average except during startup, shutdown		N	
	BAAQMD condition #14970, part 20e	Y		48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 21e	Y		8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1" for < 3 min/hr."		N	

## VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

**Table VII-B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-202 – HEAT RECOVERY STEAM GENERATOR**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD 6-1-304	Y		During tube cleaning, Ringelmann No. 2 for 3 min/hr and 6 min/billion btu/24 hours		N	
	NSPS 40 CFR 60.42Da(b)	Y		< 20% opacity, 6 minute average, except one six minute period/hr up to 27% opacity		N	
Filterable Particulate	BAAQMD 6-1-310	Y		0.15 grain/dscf @ 6% O <sub>2</sub>		N	
	NSPS 40 CFR 60.42Da(a) (1)	Y		0.03 lb /mmbtu except during startup, shutdown, or malfunction		N	
PM10	BAAQMD condition #14970, part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, Part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A	Source test
	BAAQMD condition #14970, Part 21d	Y		58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-B  
 Applicable Limits and Compliance Monitoring Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD condition #14970, Part 20c	Y		352.6 lb/day (as CH <sub>4</sub> ) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, Part 20c	Y		352.6 lb/day (as CH <sub>4</sub> ) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A	Source test
	BAAQMD condition #14970, Part 21c	Y		48.45 ton/yr (as CH <sub>4</sub> ) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
NH <sub>3</sub>	BAAQMD condition #14970, part 9f	N		20 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 25	P/E	Calculations or source test
	BAAQMD condition #14970, part 9f	N		20 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 27	P/A	Source test
Formaldehyde	BAAQMD condition #14970, Part 22a	N		4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations
	BAAQMD condition #14970, part 22a	N		4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/every 2 years	Source Test

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-B  
 Applicable Limits and Compliance Monitoring Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Benzene	BAAQMD condition #14970, Part 22b	N		116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations
	BAAQMD condition #14970, part 22b	N		116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970 part 29	P/every 2 years	Source Test
Specified PAH's	BAAQMD condition #14970, part 22c	N		78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations
	BAAQMD condition #14970, Part 22c	N		78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/every 2 years	Source Test
Heat input limit	BAAQMD condition #14970, part 3	Y		288.9 mmbtu/hr, 3-hr average	BAAQMD condition #14970, part 23	C	fuel meter, calculations
	BAAQMD condition #14970, part 4	Y		2,129 mmbtu/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C	fuel meter, calculations
Heat input limit	BAAQMD condition #14970, part 5	Y		51,029 mmbtu/day for turbine and HRSG combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-B  
 Applicable Limits and Compliance Monitoring Requirements  
 S-202 – HEAT RECOVERY STEAM GENERATOR**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, part 6	Y		15,613,000 mmbtu/yr for turbine and HRSG combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
	BAAQMD condition #14970, part 18	Y		57,544 mmbtu/day, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
	BAAQMD condition #14970, part 19	Y		19,023,000 mmbtu/yr, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C	fuel meter, calculations
Oxidizing catalyst temp	BAAQMD condition #14970, part 9e	Y		550 degrees Fahrenheit	BAAQMD condition #14970, part 23	C	temperature monitor

<sup>1</sup> Ground Level Concentration

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-C  
 Applicable Limits and Compliance Monitoring Requirements  
 S203, S204, S205– AUXILIARY STEAM BOILERS**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOX	BAAQMD 9-3-303	N		125 ppm	BAAQMD 1-520.1	C	CEM
	BAAQMD 9-7-301.1	N		30 ppmv @3%O <sub>2</sub> , dry	BAAQMD 1-520.1	C	CEM
	BAAQMD cond# 14970, part 17a	Y		3.7 lb/hr, 3-hr average for each boiler	BAAQMD cond# 14970, part 23	C	CEM
	BAAQMD cond# 14970, part 17b	Y		8.2 ppmv @ 3% O <sub>2</sub> , dry, 3-hr average	BAAQMD cond# 14970, part 23	C	CEM
	BAAQMD cond# 14970, part 20a	Y		969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	C	CEM
	BAAQMD cond# 14970, part 21a	Y		160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	C	CEM
	NSPS 40 CFR 60.44b (a)(1)(i)	Y		0.1 lb/mmbtu	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-C  
 Applicable Limits and Compliance Monitoring Requirements  
 S203, S204, S205– AUXILIARY STEAM BOILERS**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD 9-7-301.4	N		400 ppmv @ 3% O <sub>2</sub> , dry	BAAQMD cond# 14970, part 23	C	CEM
CO	BAAQMD cond# 14970, part 17c	Y		3.0 lb/hr, 3-hr average for each boiler	BAAQMD cond# 14970, part 23	C	CEM
	BAAQMD cond# 14970, part 17d	Y		11.0 ppmv @ 3% O <sub>2</sub> , dry, 3-hr average	BAAQMD cond# 14970, part 23	C	CEM
	BAAQMD cond# 14970, part 20b	Y		745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	C	CEM
	BAAQMD cond# 14970, part 21b	Y		73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	C	CEM
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
SO <sub>2</sub>	BAAQMD cond# 14970, part 20e	Y		48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 24	P/D	Calculations

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-C  
 Applicable Limits and Compliance Monitoring Requirements  
 S203, S204, S205– AUXILIARY STEAM BOILERS**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD cond# 14970, part 21e	Y		8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 24	P/A	Calculations
Opacity	BAAQMD 6-301	N		Ringelmann No. 1 for no more than 3 min/hr		N	
	BAAQMD 6-304	Y		During tube cleaning, Ringelmann No. 2 for 3 min/hr and 6 min/billion btu/24 hours		N	
Filterable Particulate	BAAQMD 6-1-310	Y		0.15 grain/dscf @ 6% O2		N	
PM10	BAAQMD cond# 14970, part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 24	P/D	Calculations
	BAAQMD cond# 14970, part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 28	P/1-2 times per 5 years	Source Test
PM10	BAAQMD cond# 14970, part 21d	Y		58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 24	P/A	Calculations



## VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

**Table VII-C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S203, S204, S205– AUXILIARY STEAM BOILERS**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD cond# 14970, part 20c	Y		352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 24	P/D	Calculations
POC	BAAQMD cond# 14970, part 20c	Y		352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 28	P/1-2 times per 5 years	Source Test
	BAAQMD cond# 14970, part 21c	Y		48.45 ton/yr (as CH4) for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 24	P/A	Calculations
NH3	BAAQMD cond# 14970, part 17f	N		20 ppmv, @ 15% O2, dry, averaged over 3 hrs	BAAQMD cond# 14970, part 25	P/E	Calculations or source test
	BAAQMD cond# 14970, part 17f	N		20 ppmv, @ 15% O2, dry, averaged over 3 hrs	BAAQMD cond# 14970, part 28	P/1-2 times per 5 years	Source Test
Formaldehyde	BAAQMD cond# 14970, part 22a	N		4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 26	P/A	calculations
Benzene	BAAQMD cond# 14970, part 22b	N		116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 26	P/A	calculations

**VII. Applicable Emission limits & Compliance Monitoring Requirements  
 (continued)**

**Table VII-C  
 Applicable Limits and Compliance Monitoring Requirements  
 S203, S204, S205– AUXILIARY STEAM BOILERS**

Type of limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Specified PAH's	BAAQMD cond# 14970, part 22c	N		78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 26	P/A	calculations
Heat input limit	BAAQMD cond# 14970, part 11	Y		376 mmbtu/hr, 3-hr average for each boiler	BAAQMD cond# 14970, part 23	C	fuel meter, calculations
Heat input limit	BAAQMD cond# 14970, part 12	Y		18,048 mmbtu/day, for all 3 boilers combined	BAAQMD cond# 14970, part 23	C	fuel meter, calculations
	BAAQMD cond# 14970, part 13	Y		6,575,000 mmbtu/yr, for all 3 boilers combined	BAAQMD cond# 14970, part 23	C	fuel meter, calculations
	BAAQMD cond# 14970, part 18	Y		57,544 mmbtu/day, for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	C	fuel meter, calculations
Heat input limit	BAAQMD cond# 14970, part 19	Y		19,023,000 mmbtu/yr, for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	C	fuel meter, calculations
Oxidizing catalyst temp	BAAQMD cond# 14970, part 17e	Y		430 degrees Fahrenheit	BAAQMD cond# 14970, part 23	C	temperature monitor

<sup>1</sup> Ground Level Concentration

## VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD 6-1-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-1-304	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-1-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD 9-3-303	New or Modified Heat Transfer Operation Limits	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling
BAAQMD 9-7-301.1	Performance Standard, NO <sub>x</sub> , Gaseous Fuel	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-301.4	Performance Standard, CO, Gaseous Fuel	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-9-301.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

**VIII. Test Methods (continued)**

**Table VIII (continued)  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
NSPS Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978	
60.42Da (a)(1)	Particulate Limit	EPA Method 5, Determination of Particulate Emissions from Stationary Sources
60.42Da (b)	Opacity Limit	EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
60.43Da (b)(2)	SO2 limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
60.44Da (a)(1)	NOX limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
60.44b (a)(1)(i)	NOX limit	None
Subpart GG	Standards of Performance for Stationary Gas Turbines	
60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (a)	SO2 Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D 1072-80, Standard Method for Total Sulfur in Fuel Gases ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation
<b>BAAQMD                      Cond# 14970</b>		

**VIII. Test Methods (continued)**

**Table VIII (continued)  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
part 2	Hourly heat input limit for turbine	None
part 3	Hourly heat input limit for HRSG	None
part 4	Hourly heat input limit for turbine and HRSG	None
part 5	Daily heat input limit for turbine and HRSG	None
part 6	Annual heat input limit for turbine and HRSG	None
part 9a	Hourly NOX limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 9b	NOX concentration limit	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 9c	Hourly CO limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 9d	CO concentration limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 9f	Ammonia limit	Manual of Procedures, Volume IV, ST-1B, Ammonia, Integrated Sampling
part 11	Hourly heat input limit for each boiler	None
part 12	Total daily heat input limit for S-203 to S-205, Boilers	None
part 13	Total annual heat input limit for S-203 to S-205, Boilers	None
part 17a	Hourly NOx limits	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 17b	NOx concentration limits	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling

### VIII. Test Methods (continued)

**Table VIII (continued)**  
**Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
part 17c	Hourly CO limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 17d	CO concentration limit	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
part 17f	Ammonia limit	Manual of Procedures, Volume IV, ST-1B, Ammonia, Integrated Sampling
part 22	Combined annual emission limits for toxic air contaminants (formaldehyde, benzene, and specified PAHs)	CARB Method 430

**IX. PERMIT SHIELD**

**A. NON-APPLICABLE REQUIREMENTS**

None.

**B. SUBSUMED REQUIREMENTS**

Pursuant to District Regulations 2-6-233 and 2-6-409.12, as of the date this permit is issued, the federally enforceable “subsumed” regulations and/or standards cited in the following table (Table IX) are not applicable to the source or group of sources identified at the top of the table. The District has determined that compliance with the “streamlined” requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the “subsumed” regulations and/or standards. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the “subsumed” regulatory and/or statutory provisions cited.

**Table IX  
 Permit Shield for Subsumed Requirements  
 S203, S204, S205– AUXILIARY STEAM BOILERS**

<b>Subsumed Requirement Citation</b>	<b>Title or Description</b>	<b>Streamlined Requirements</b>	<b>Title or Description</b>
40 CFR 60.48b(b)	Continuous Monitoring of Nitrogen Oxides	BAAQMD Condition 14970, part 23b	Requirement for continuous emission monitor for NOx

**X. REVISION HISTORY**

Application #13143

Renewal

November 18, 2008



## **XI. GLOSSARY**

### **APCO**

Air Pollution Control Officer

### **BAAQMD**

Bay Area Air Quality Management District

### **BACT**

Best Available Control Technology

### **BTU**

British thermal units

### **CAA**

The federal Clean Air Act

### **CAAQS**

California Ambient Air Quality Standards

### **CEC**

California Energy Commission

### **CEQA**

California Environmental Quality Act

### **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

### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

### **District**

The Bay Area Air Quality Management District

### **EPA**

The federal Environmental Protection Agency

## **XI. Glossary**

### **Excluded**

Not subject to any District Regulations

### **Federally Enforceable, FE**

All limitations and conditions which are enforceable by the Administrator of the 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), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

### **HAP**

Hazardous Air Pollutant - Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by both 40 CFR Part 63, and District Regulation 2, Rule 5.

### **HHV**

Higher heating value

### **HRSG**

Heat Recovery Steam Generator

### **Major Facility**

A facility with potential emissions of regulated air pollutants greater than or equal to 100 tons per year, greater than or equal to 10 tons per year of any single hazardous air pollutant, and/or greater than or equal to 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity as determined by the EPA administrator.

### **MFR**

Major Facility Review - The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

### **MOP**

The District's Manual of Procedures

### **NAAQS**

National Ambient Air Quality Standards

### **NESHAPS**

National Emission Standards for Hazardous Air Pollutants - Contained in 40 CFR Part 61.

### **NMHC**

Non-methane Hydrocarbons

### **NO<sub>x</sub>**

Oxides of nitrogen

### **NSPS**

Standards of Performance for New Stationary Sources - Federal standards for emissions from

## **XI. Glossary**

new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by both 40 CFR Part 60 and District Regulation 10.

### **NSR**

New Source Review. A federal program for preconstruction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NO<sub>x</sub>, PM<sub>10</sub>, and SO<sub>2</sub>.

### **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to Titles IV and V of the Clean Air Act.

### **POC**

Precursor Organic Compounds

### **PM**

Total Particulate Matter

### **PM<sub>10</sub>**

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

### **PSD**

Prevention of Significant Deterioration - A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

### **PUC**

Public Utilities Commission

### **SIP**

State Implementation Plan - State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

### **SO<sub>2</sub>**

Sulfur dioxide

### **Title V**

## XI. Glossary

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

### **TBACT**

Best Available Control Technology for Toxics

### **VOC**

Volatile Organic Compounds

### **Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m <sup>2</sup>	=	square meter
min	=	minute
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
scfm	=	standard cubic feet per minute
yr	=	year