### **Bay Area Air Quality Management District**

375 Beale Street, Suite 600 San Francisco, CA 94105 (415) 771-6000

### **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

**Responsible Official** 

Kevin Kringle Plant Manager 510-787-4101 **Facility Contact** 

Christopher Sargent Environmental Specialist 510-787-4101

**Type of Facility:** Cogeneration BAAQMD Permit Division Contact:

**Primary SIC:** 4931 Dennis Jang

**Product:** Electricity and Steam

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

Signed by Pam J. Leong
Pam J. Leong, Director of Engineering Division
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  $\frac{5}{4}$ 11);

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 4/18/12);

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 on12/21/2004);

SIP Regulation 2, Rule 4 - Permits, Emissions Banking

(as approved by EPA through 1/26/1999);

BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants

(as amended by the District Board on 01/06/10);

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 August 28, 2014 and expires on August 27, 2019. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than January 27, 2019 and no earlier than August 27, 2018. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after August 27, 2019. If the permit renewal has not been issued by August 27, 2019 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)

### I. Standard Conditions

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 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 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

#### 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)

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 by e-mail to compliance@baaqmd.gov or by postal mail to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105 Attn: Title V Reports

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### I. Standard Conditions

#### **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 29th. 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 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 by email to r9.aeo@epa.gov or postal mail to the Environmental Protection Agency at the following address:

Director Enforcement Division, TRII & Air Section (ENF-2-1) USEPA, Region 9 75 Hawthorne Street San Francisco, CA 94105

(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 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.

(Basis: MOP Volume II, Part 3, §4.8)

3. 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)

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

## II. Equipment List

### **B.** Abatement Device List

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	Limit or
A-#	Description	Controlled	Requirement	Parameters	Efficiency
A-201	Oxidation Catalyst	S-201,	BACT,	Minimum Operating	CO ≤ 46.6
		S-202	BAAQMD 2-5	Temperature of	lbs/hr, 3 hr
				550 °F	avg; ≤ 10
					ppmv at 15%
					O <sub>2</sub> , dry, 3 hr
					avg
A-202	Selective Catalytic	S-201,	BACT	None	NOx ≤ 39.2
	Reduction System	S-202			lbs/hr, 3 hr
					avg; $\leq 5.0$
					ppmv at 15%
					O <sub>2</sub> , dry 3 hr
					avg;
					$NH_3 \leq 20$
					ppmv at 15%
					O <sub>2</sub> , dry, 3 hr
					avg
A-203	Oxidation Catalyst	S-203	BACT,	Minimum Operating	CO emissions
			BAAQMD 2-5	Temperature of	shall not
				430 °F	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

### **B.** Abatement Device List

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	Limit or
A-#	Description	Controlled	Requirement	Parameters	Efficiency
A-204	Selective Catalytic	S-203	BACT	None	NOx ≤ 3.7
	Reduction System				lbs/hr, 3 hr
					avg; $\leq 8.2$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr;
					$NH_3 \leq 20$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr
					avg
A-205	Oxidation Catalyst	S-204	BACT,	Minimum Operating	CO ≤ 3.0
			BAAQMD 2-5	Temperature of	lbs/hr, 3 hr
				430 °F	avg; ≤ 11.0
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr
					avg
A-206	Selective Catalytic	S-204	BACT	None	$NOx \leq 3.7$
	Reduction System				lbs/hr, 3 hr
					avg; $\leq 8.2$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr;
					$NH_3 \leq 20$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr
					avg
A-207	Oxidation Catalyst	S-205	BACT,	Minimum Operating	CO ≤ 3.0
			BAAQMD 2-5	Temperature of	lbs/hr, 3 hr
				430 °F	avg; $\leq 11.0$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr
					avg

## II. Equipment List

### **B.** Abatement Device List

**Table II B – Abatement Devices** 

		Source(s)	Applicable	Operating	Limit or
A-#	Description	Controlled	Requirement	Parameters	Efficiency
A-208	Selective Catalytic	S-205	BACT	None	$NOx \leq 3.7$
	Reduction System				lbs/hr, 3 hr
					avg; $\leq 8.2$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr;
					$NH_3 \leq 20$
					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 <u>both</u> 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

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions ( 5/04/11)	N

## III. Generally Applicable Requirements

Table III Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 1	General Provisions and Definitions (6/28/1999)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (4/18/12)	N
SIP Regulation 2, Rule 1	General Requirements (1/26/1999)	Y
BAAQMD 2-1-429	Federal Emissions Statement (12/21/04)	N
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	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 ( 6/19/01)	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	Odorous 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 ( 7/1/09)	Y
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic compounds - General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds – Emulsified and Liquid Asphalts (6/1/94)	Y
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

## III. Generally Applicable Requirements

Table III Generally Applicable Requirements

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/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	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/1995)	N
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - 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
California Health and Safety Code Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate  Matter from Portable Engines Rated at 50 Horsepower and Greater	N
40 CFR Part 61, Subpart M	National Emission Standards Hazardous Air Pollutants, Asbestos	Y
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

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## III. Generally Applicable Requirements

Table III Generally Applicable Requirements

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

## IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS, LIMITS, COMPLIANCE MONITORING, & REPORTING 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.

This section summarizes the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, combined with previous Section VII, Applicable Limits and Compliance Monitoring Requirements. 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), weekly (W), 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.

A column for recordkeeping, entitled "R", and a column for reporting entitled "Reporting Frequency" have been added to the new Table IV for completeness. If the column entry for "R" is "Y", then recordkeeping is required. If the entry is blank, then no recordkeeping is required.

Please note that the reporting frequency entries do not reflect the annual compliance certification reporting requirement described in section IG of the Title V permit or the semi-annual monitoring reporting requirement described in section IF of the Title V

permit.

Note: "M#" means "EPA test method number"

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
BAAQMD Regulation 1	General Provisions and Definitions (5/4/2011)						
1-107	Combination of Emissions						N
1-520	Continuous Emission Monitoring						N
1-520.8	Continuous Emission Monitoring (Monitors Pursuant to 2-1-403)						N
1-522	Continuous Emission Monitoring and Recordkeeping Procedures					Y	N
1-522.4	Periods of Inoperation	Periods of inoperation of CEM greater than 24 hours		N	By the following working day	Y	N
1-522.7	Emission Limit Exceedance Reporting Requirements	Indicated excess of any emission standard as indicated by CEM		N	Within 96 hours of occurrence	Y	N
1-522.8	Monitoring Data Submittal	Monitoring data submitted to APCO		N	Monthly	Y	N
1-522.9	Recordkeeping	CEM Operation Records and monitor data	1-522.9	P/M Recordkeeping	N	Y	N
1-523	Parametric Monitoring and Recordkeeping Procedures					Y	N

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
1-602	Area and Continuous Emission Monitoring Requirements						N
SIP Regulation 1	General Provisions and Definitions (6/28/1999)						
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					Y	Y
1-522.7	Emission Limit Exceedance Reporting Requirements	Indicated excess of any emission standard as indicated by CEM		N	Within 96 hours of occurrence	Y	Y
1-523	Parametric Monitoring and Recordkeeping Procedures					Y	Y
1-602	Area and Continuous Emission Monitoring Requirements						Y
BAAQMD Regulation 6, Rule 1	Particulate Matter, General Requirements (12/05/07)						
6-1-301	Ringelmann No. 1 Limitation	OPACITY Not to exceed Ringelmann No. 1 for more than 3 minutes in any hour		N			N

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
6-1-305	Visible Particles	Visible Particles Shall not be emitted in sufficient quantities to cause annoyance		N			N
6-1-310	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf		N			N
6-1-310.3	Heat Transfer Operations	FILTERABLE PARTICULATE 0.15 gr/dscf @6% O2		<u>N</u>			N
SIP Regulation 6	Particulate Matter and Visible Emissions (09/04/98)						
6-301	Ringelmann No. 1 Limitation	OPACITY Not to exceed Ringelmann No. 1 for more than 3 minutes in any hour		N			Y
6-305	Visible Particles	Visible Particles Shall not be emitted in sufficient quantities to cause annoyance		N			Y
6-310	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf		N			Y
6-310.3	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf @6% O2		N			Y
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants: Sulfur Dioxide (3/15/1995)						

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
9-1-301	Ground Level Concentration	SO2 < 0.5 ppm continuously for 3 consecutive minutes, or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours.		N		N	Y
9-1-302	General Emission Limitations	Ground level concentration of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		N	Y
BAAQMD Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/6/2006)						
9-9-113	Exemption – Inspection/Maintenance						
9-9-114	Exemption – Start- Up/Shutdown						
9-9-301	Emission Limits, General						
9-9-301.1.3	Emission Limits, Turbines greater than 10 MW with SCR	NOx 9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C/ CEM			Y
9-9-301.2	Emission Limits: Turbines greater than 500 MMBTU/hr, fired on natural gas	NOx 0.15 lb/MWhr or 5ppmv (dry, 15% O2)	BAAQMD 9-9-501	C/ CEM			Y
9-9-401	Certification, Efficiency						
9-9-501	Monitoring and recordkeeping requirements					Y	
9-9-601	Determination of Emissions						
9-9-602	Determination of Stack Gas Oxygen						

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
9-9-604	Determination of HHV and LHV						
SIP Regulation 9, Rule 9	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (12/15/1997)						
9-9-113	Exemption – Inspection/Maintenance						
9-9-114	Exemption – Start- Up/Shutdown						
9-9-301	Emission Limits, General						
9-9-301.3	Emission Limits, Turbines greater than 10 MW with SCR	NOx 9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C/ CEM		N	Y
9-9-401	Certification, Efficiency						
9-9-501	Monitoring and recordkeeping requirements					Y	
9-9-601	Determination of Emissions						
9-9-604	Determination of HHV and LHV						
BAAQMD Regulation 10, Subpart GG	NSPS Incorporation by Reference, Stationary Gas Turbines (2/16/2000)						
10-40	Subpart GG. Standards of Performance For Stationary Gas Turbines						
40 CFR 60	Standards of Performance for New Stationary Sources (5/6/2008)						
Subpart A	General Provisions						
60.4(a)	Reports to EPA						

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
60.4(b)(F)	Reports to District						
60.7(a)	Written notification						
60.7(b)	Records					Y	
60.8	Performance Tests						
60.9	Availability of Information						
60.11(a)	Compliance with standards and maintenance requirements						
60.11(d)	Minimizing emissions						
60.12	Circumvention						
60.13	Monitoring Requirements						
60.19	General notification and reporting requirements						
Subpart GG	Standards of Performance for Stationary Gas Turbines (2/24/2006)						
60.330(a)	Applicable to Stationary Gas Turbines greater than 10 MM BTU/hr						
60.330(b)	Applicable to Facilities Constructed after October 3, 1977						
60.332(a)(1)	NOx limit	NOx 155.2 ppmv @ 15% O2, dry	NSPS 40 CFR 60.33(c)	C/ CEM			Y

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
60.333	Performance Standards, SO <sub>2</sub>	SO2 0.015% (vol) @ 15% O2, dry	Exempt from monitoring requirement per NSPS 40 CFR 60.334(h)(3) for PUC quality natural gas.	N			Y
60.333(b)	Fuel Sulfur Content	Fuel Sulfur Content 0.8 percent by weight	Exempt from monitoring per 60.334(h)(3)	N			Y
60.334(c)	NOx CEMs						
60.334(h)(3)	Exemption from sulfur fuel monitoring requirements (Natural Gas)						
60.334(j)(1 (iii)	NOx Excess Emissions and Monitor Downtime reporting requirements						
60.335	Test Methods and Procedures						
BAAQMD Condition #14970							
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)	Heat Input 1,780 MM btu/hr, 3-hr average	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 4	Hourly heat input limit for turbine and HRSG (Basis: PSD for NO <sub>x</sub> )	Heat Input 2,129 MMBTU/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 5	Daily heat input limit for turbine and HRSG (Basis: PSD for PM <sub>10</sub> )	Heat Input 51,029 MMBTUu/day for turbine and HRSG combined	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 6	Annual heat input limit for turbine and HRSG (Basis: offsets)	Heat Input 15,613,000 MMBTU/yr for turbine and HRSG combined	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 8	Oxidizing Catalyst and Selective Catalytic Reduction (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])						Y
part 9a	Hourly NOx mass emission limit (Basis: PSD)	NOx 39.2 lb/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9b	NOx concentration limit (Basis: BACT)	NOx 5.0 ppmv @ 15% 02, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9c	Hourly CO mass emission limit (Basis: PSD)	CO 46.6 lb/hr, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9d	CO concentration limit (Basis: BACT)	CO 10 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 9e	Temperature limit for Oxidizing Catalyst (Basis: BAAQMD Reg. 2-5 [Toxics] for formaldehyde, benzene, and PAH's)	Temperature 550 degrees Fahrenheit	BAAQMD condition #14970, part 23	C/ Temperature Monitor		Y	N
part 9f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	NH3 20 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	N
part 9f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	NH3 20 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 24	P/E Calculations based on Source Test		Y	N
part 18	Combined daily heat input rate for sources S-201 through S-205 (Basis: PSD, CEC offsets)	Heat Input 57,544 MM btu/day, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ Fuel meter, calculations		Y	Y
part 19	Combined annual heat input rate for sources S-201 through S-205 (Basis: Offsets)	Heat Input 19,023,000 MMBTU/yr, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ Fuel meter, calculations		Y	Y
part 20	Combined daily emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)						

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 20a	Combined daily NOx emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	NOx 969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 20b	Combined daily CO emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	CO 745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 20c	Combined daily POC emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	POC 352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 20c	Combined daily POC emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	POC 352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	Y
part 20d	Combined daily PM10 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	PM10 329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 20d	Combined daily PM10 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	PM10 329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	Y

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# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 20e	Combined daily SO2 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	SO2 48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 21	Combined annual emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)						
part 21a	Combined annual NOx emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	NOx 160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 21b	Combined annual CO emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	CO 73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 21c	Combined annual POC emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	POC 48.45 ton/yr (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 21d	Combined annual PM10 emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	PM10 58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 21e	Combined annual SO2 emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	SO2 8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 22	Combined annual emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])						
part 22a	Combined annual formaldehyde emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Formaldehyde 4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22a	Combined annual formaldehyde emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Formaldehyde 4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	N
part 22b	Combined annual benzene emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Benzene 116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22b	Combined annual benzene emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Benzene 116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	N

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 22c	Combined annual PAH emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	PAH 78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22c	Combined annual PAH emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	PAH 78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	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

# Table IV - A Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-201 - Gas Turbine

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/ Type	Reporting Frequency	R	FE
part 29	Source tests-toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])						N
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)				As specified by regulation or permit condition		Y
part 31	Records (Basis: BAAQMD Reg. 2-6-501)					Y	Y
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Violation of any permit condition			Within 96 hours of violation	Y	Y

# Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
BAAQMD	General Provisions and						
Regulation 1	<b>Definitions</b> (7/19/2006)						
1-107	Combination of Emissions						Y

# Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
1-520	Continuous Emission						Y
	Monitoring						
	Continuous Emission						
1-520.8	Monitoring (Monitors						Y
	Pursuant to 2-1-403)						
	Continuous Emission						
1-522	Monitoring and						Y
_	Recordkeeping Procedures						
		Periods of inoperation			By the		
С	Periods of Inoperation	of CEM greater than		N	following	Y	Y
	•	24 hours			working		
					day		
1-522.7	Indicated excess of any	Indicated excess of any			Within 96		
	emission standard	emission standard as		N	hours of	Y	Y
		indicated by CEM			occurrence		
1-523	Parametric Monitoring and						Y
1-323	Recordkeeping Procedures						1
SIP	General Provisions and						
Regulation 1	<b>Definitions</b> (6/28/1999)						
	Continuous Emission						
1-522	Monitoring and					Y	Y
	Recordkeeping Procedures						
1-522.7	Emission Limit Exceedance						Y
	Reporting Requirements						
1-523	Parametric Monitoring and					Y	Y
	Recordkeeping Procedures						
1-523.3	Parametric Monitoring and					Y	Y
	Recordkeeping Procedures						$\vdash$
BAAQMD	Particulate Matter,						
Regulation 6,	General Requirements						
Rule 1	(12/05/07)						

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
6-1-301	Ringelmann No. 1 Limitation	OPACITY Not to exceed Ringelmann No. 1 for more than 3 minutes in any hour		N			N
6-1-304	Tube Cleaning	OPACITY Not to exceed Ringelmann No. 2 for more than 3 minutes in any hour		N			N
6-1-305	Visible Particles	Visible Particles Shall not be emitted in sufficient quantities to cause annoyance		N			N
6-1-310	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf		N			N
6-1-310.3	Heat Transfer Operation	FILTERABLE PARTICULATE 0.15 gr/dscf @6% O2		N			N
SIP Regulation 6	Particulate Matter and Visible Emissions (09/04/98)						
6-301	Ringelmann No. 1 Limitation	OPACITY Not to exceed Ringelmann No. 1 for more than 3 minutes in any hour		N			Y

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
6-304	Tube Cleaning	OPACITY Not to exceed Ringelmann No. 2 for more than 3 minutes in any hour		N			Y
6-305	Visible Particles	Visible Particles Shall not be emitted in sufficient quantities to cause annoyance		N			Y
6-310	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf		N			Y
6-310.3	Heat Transfer Operation	FILTERABLE PARTICULATE 0.15 gr/dscf @6% O2		N			Y
BAAQMD	Inorganic Gaseous						
Regulation 9,	Pollutants: Sulfur Dioxide						
Rule 1	(3/15/1995)						
9-1-301	Ground Level Concentration	SO2 < 0.5 ppm continuously for 3 consecutive minutes, or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours.		N			Y

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
		SO2					
		Ground level					
9-1-302	General Emission	concentration of 0.5		N			Y
7 1 302	Limitations	ppm for 3 min or 0.25		11			1
		ppm for 60 min or 0.05					Y
		ppm for 24 hours					
	Inorganic Gaseous						
BAAQMD	Pollutants, Nitrogen						
Regulation	Oxides From Heat						
9, Rule 3	Transfer Operations						
	(3/17/1982)						
9-3-303	New or Modified Heat	125 ppm	BAAQMD	C/			N
7 3 303	Transfer Operation Limits	123 ррш	1-520.1	CEM			-11
9-3-601	Determination of Nitrogen						
7-3-001	Oxides						
	Inorganic Gaseous						
BAAQMD	Pollutants, NOx and CO						
Regulation 9,	from Utility Electric						
Rule 11	Power Gen Boilers						
	(5/17/2000)						
9-11-114	Exemption, Heat Recovery						Y
<i>)</i> -11-114	Steam Generators						1
BAAQMD	NSPS Incorporation by						
Regulation	Reference, Electric Utility						
10, Subpart	Steam Generating Units						
Da	(2/16/2000)						

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
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						Y
40 CFR 60	periods)  Standards of Performance for New Stationary Sources (5/6/2008)						
Subpart A	General Provisions						
60.4(a)	Reports to EPA						Y
60.4(b)(F)	Reports to District						Y
60.7	Notification and record keeping					Y	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
Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/13/2007)						

# Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
60.40Da(a)	Applicability						Y
60.42Da(a)(1)	Particulate Limit	0.03 lb /MM BTU except during startup, shutdown, or malfunction		N			Y
60.42Da(b)	Opacity Limit	< 20% opacity, 6 minute average, except one six minute period/hr up to 27% opacity		N			Y
60.43Da(b)(2)	SO2 limit	0.2 lb/MM BTU except during startup, shutdown, or malfunction	Exempt from CEMS per NSPS 40 CFR 60.49Da(o)	N			Y
60.43Da(g)	Averaging 30-day rolling average basis						Y
60.44Da(a)(1)	NOX limit	0.2 lb/MM BTU except during startup, shutdown, or malfunction	Exempt from CEMS per NSPS 40 CFR 60.49Da(o)	N			Y
60.48Da(a)	Compliance, particulate limitation						Y
60.48Da(b)	Compliance, NOX limitation						Y
60.48Da(c)	Applicability of Limits						Y
60.49Da(b)	Exemption from SO2 CEM for natural gas fired units						Y
60.49Da(o)	Exemption from NOx 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

# Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
BAAQMD Condition #14970							
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)	Heat Input 1,780 MM btu/hr, 3-hr average	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 4	Hourly heat input limit for turbine and HRSG (Basis: PSD for NO <sub>x</sub> )	Heat Input 2,129 MMBTU/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 5	Daily heat input limit for turbine and HRSG (Basis: PSD for PM <sub>10</sub> )	Heat Input 51,029 MMBTU/day for turbine and HRSG combined	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 6	Annual heat input limit for turbine and HRSG (Basis: offsets)	Heat Input 15,613,000 MMBTU/yr for turbine and HRSG combined	BAAQMD condition #14970, part 23	C/ Fuel Meter, Calculations		Y	Y
part 7	Turbine must operate during HRSG operation (Basis: BACT for NOx, CO, and POC)						Y
part 8	Oxidizing Catalyst and Selective Catalytic Reduction (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])						Y

## Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 9a	Hourly NOx limit (Basis: PSD)	NOx 39.2 lb/hr for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9b	NOx concentration limit (Basis: BACT)	NOx 5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9c	Hourly CO limit (Basis: PSD)	CO 46.6 lb/hr, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9d	CO concentration limit (Basis: BACT)	CO 10 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 9e	Temperature limit for Oxidizing Catalyst (Basis: BAAQMD Reg. 2-5 [Toxics] for formaldehyde, benzene, and PAH's)	Temperature 550 degrees Fahrenheit					
part 9f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	NH3 20 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 24	P/E Calculations based on Source Test		Y	N
part 9f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	NH3 20 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	N
part 18	Combined daily heat input rate for sources S-201 through S-205 (Basis: PSD, CEC offsets)	Heat Input 57,544 MMBTU/day, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ Fuel meter, calculations		Y	Y

## Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 19	Combined annual heat input rate for sources S-201 through S-205 (Basis: Offsets)	Heat Input 19,023,000 MMBTU/yr, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ Fuel meter, calculations		Y	Y
part 20	Combined daily emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)						Y
part 20a	Combined daily NOx emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	NOx 969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 20b	Combined daily CO emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	CO 745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 20c	Combined daily POC emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	POC 352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 20c	Combined daily POC emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	POC 352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	Y

## Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 20d	Combined daily PM10 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	PM10 329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 20d	Combined daily PM10 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	PM10 329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	Y
part 20e	Combined daily SO2 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	SO2 48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 21	Combined annual emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)						Y
part 21a	Combined annual NOx emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	NOx 160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 21b	Combined annual CO emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	CO 73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y

## Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 21c	Combined annual POC emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	POC 48.45 ton/yr (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 21d	Combined annual PM10 emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	PM10 58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 21e	Combined annual SO2 emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	SO2 8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 22	Combined annual emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])						N
part 22a	Combined annual formaldehyde emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Formaldehyde 4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22a	Combined annual formaldehyde emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Formaldehyde 4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	N

## Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 22b	Combined annual benzene emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Benzene 116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22b	Combined annual benzene emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Benzene 116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	N
part 22c	Combined annual PAH emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	PAH 78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22c	Combined annual PAH emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	PAH 78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	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])						

## Table IV - B Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
	Toxic air contaminant						
part 26	emission calculations						
part 20	(Basis: BAAQMD Reg. 2-5						
	[Toxics])						
	Source tests - water content,						
part 27	stack gas, O <sub>2</sub> , POC, PM <sub>10</sub>					Y	Y
	(Basis: offsets, PSD)						
	Source tests - NH <sub>3</sub> (Basis:						
part 27	BAAQMD Reg. 2-5					Y	N
	[Toxics])						
	Source tests - toxic air						
	contaminants (Basis:					Y	N
part 29	BAAQMD Reg. 2-5					1	IN
	[Toxics])						
					As		
					specified		
part 30	Reports (Basis: BAAQMD				by		Y
part 30	Reg. 2-6-502)				Regulation		1
					or permit		
					condition		
part 31	Records (Basis: BAAQMD					Y	Y
part 31	Reg. 2-6-501)					•	
	Violation reporting (Basis:	Violation of any			Within 96		
part 32	BAAQMD Reg. 1-522.7)	permit condition			hours of	Y	Y
	Di ii QiiiD (Cg. 1-322.1)				violation		

# Table IV - C Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
BAAQMD	General Provisions and						
Regulation 1	<b>Definitions</b> (7/19/2006)						
1-107	Combination of Emissions						Y
1-520	Continuous Emission  Monitoring						N
1-520.1	Continuous Emission Monitoring of NOx, CO2 or O2						N
1-522	Continuous Emission  Monitoring and  Recordkeeping Procedures					Y	N
1-522.4	Periods of Inoperation	Periods of inoperation of CEM greater than 24 hours		N	By the following working day	Y	N
1-522.7	Indicated excess of any emission standard	Indicated excess of any emission standard as indicated by CEM		N	Within 96 hours of occurrence	Y	N
1-523	Parametric Monitoring and Recordkeeping Procedures					Y	N
1-523.3	Parametric Monitoring and Recordkeeping Procedures					Y	N
1-602	Area and Continuous Emission Monitoring Requirements						N
SIP	General Provisions and						
Regulation 1	<b>Definitions</b> (6/28/1999)						
1-107	Combination of Emissions						Y
1-520	Continuous Emission Monitoring						Y

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
1-520.1	Continuous Emission  Monitoring of NOx, CO2 or  O2						Y
1-522	Continuous Emission  Monitoring and  Recordkeeping Procedures					Y	Y
1-522.4	Periods of Inoperation	Periods of inoperation of CEM greater than 24 hours		N	By the following working day	Y	Y
1-522.7	Emission Limit Exceedance Reporting Requirements	Indicated excess of any emission standard as indicated by CEM		N	Within 96 hours of occurrence	Y	Y
1-523	Parametric Monitoring and Recordkeeping Procedures					Y	Y
1-523.3	Parametric Monitoring and Recordkeeping Procedures					Y	Y
1-602	Area and Continuous Emission Monitoring Requirements						Y
BAAQMD	Regulation 2, Rule 1 -						
Regulation 2,	Permits, General						
Rule 1	Requirements (7/19/2006)						
2-1-501	Monitors						
BAAQMD  Bagulatian 6	Particulate Matter,						
,	•						
Regulation 6, Rule 1	General Requirements (12/05/07)						

# Table IV - C Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
6-1-301	Ringelmann No. 1 Limitation	OPACITY Not to exceed Ringelmann No. 1 for more than 3 minutes in any hour		N			N
6-1-304	Tube Cleaning	OPACITY Not to exceed Ringelmann No. 2 for more than 3 minutes in any hour		N			N
6-1-305	Visible Particles	Visible Particles Shall not be emitted in sufficient quantities to cause annoyance		N			N
6-1-310	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf		N			N
6-1-310.3	Heat Transfer Operation	FILTERABLE PARTICULATE 0.15 gr/dscf @6%O2		N			N
SIP Regulation 6	Particulate Matter and Visible Emissions (09/04/98)						
6-301	Ringelmann No. 1 Limitation	OPACITY Not to exceed Ringelmann No. 1 for more than 3 minutes in any hour		N			Y
6-304	Tube Cleaning	OPACITY Not to exceed Ringelmann No. 2 for more than 3 minutes in any hour		N			Y

# Table IV - C Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
6-305	Visible Particles	Visible Particles Shall not be emitted in sufficient quantities to cause annoyance		N			Y
6-310	Particulate Weight Limitation	FILTERABLE PARTICULATE 0.15 gr/dscf		N			Y
6-310.3	Heat Transfer Operation	FILTERABLE PARTICULATE 0.15 gr/dscf @6%O2		N			Y
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants: Sulfur Dioxide (3/15/1995)						
9-1-301	Ground Level Concentration	SO2 < 0.5 ppm continuously for 3 consecutive minutes, or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours.		N			Y
9-1-302	General Emission Limitations	SO2 Ground level concentration of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N			Y
BAAQMD Regulation 9, Rule 3	Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat Transfer Operations (3/17/1982)	1,					

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
9-3-303	New or Modified Heat Transfer Operation Limits	NOx 125 ppm	BAAQMD Regulation 1- 520.1	C CEM			N
BAAQMD Regulation 9, Rule 7	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (5/04/2011)						
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						
9-7-301	Interim Emission Limits						
9-7-301.1	Emission Limits-NOx	NOx 30 ppmv, dry @3% O2	BAAQMD Regulation 1- 520.1	C CEM			N
9-7-301.4	Emission Limits-CO	CO 400 ppmv, dry @ 3% O2	BAAQMD Condition #14970, part 23	C CEM			N
9-7-311	Insulation requirements						
9-7-312	Stack Gas Temperature Limits						
9-7-313	Tune-up Requirements						
9-7-503	Records					Y	
9-7-503.1	Records – tune-ups					Y	
9-7-503.4	Records – source tests					Y	
9-7-604	Tune-Up Procedures						

# Table IV - C Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
SIP Regulation 9, Rule 7	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (12/15/1997)						
9-7-301	Emission Limits-Gaseous Fuel						Y
9-7-301.1	Emission Limits, Gaseous Fuel-NOx	NOx 30 ppmv, dry @ 3% O2	BAAQMD Regulation 1- 520.1	C CEM			Y
9-7-301.2	Emission Limits-CO	CO 400 ppmv, dry @ 3% O2	BAAQMD Condition #14970, part 23	C CEM			Y
9-7-503	Records					Y	Y
9-7-503.4	Records – source tests					Y	Y
BAAQMD Regulation 10, Subpart Db	NSPS Incorporation by Reference, Fossil-Fuel- Fired Steam Generators (12/20/1995)						
10-4	Subpart Db. Standards of Performance For Industrial- Commercial-Institutional Steam Generating Units (24-hour maximum emissions averaging periods)						Y
40 CFR 60	Standards of Performance for New Stationary Sources (5/6/2008)						
Subpart A	General Provisions						

# Table IV - C Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable Requirement	Regulation Title or  Description of  Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
60.4(a)	Reports to EPA						Y
60.4(b)	Reports to District						Y
60.7	Notification and record keeping					Y	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
Subpart Db	for Industrial- Commercial-Institutional Steam Generating Units (6/13/2007)						
60.40b(a)	Applicability						Y
60.44b (a)(1)(i)	NOX limit	0.1 lb/MM BTU	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.				Y
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

# Table IV - C Source-specific Applicable Requirements, Limits, Compliance Monitoring, & Reporting Requirements S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
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
BAAQMD	-						
Condition							
#14970							
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)	Heat Input 376 MM BTU/hr, 3-hr average for each boiler	BAAQMD condition #14970, part 23	C Fuel Meter, Calculations		Y	Y
part 12	Total daily heat input limit for S-203 to S-205, Boilers (Basis: PSD for PM <sub>10</sub> )	18,048 MM BTU/day, for all 3 boilers combined	BAAQMD condition #14970, part 23	C Fuel Meter, Calculations		Y	Y
part 13	Total annual heat input limit for S-203 to S-205, Boilers (Basis: offsets)	6,575,000 MM BTU/yr, for all 3 boilers combined	BAAQMD condition #14970, part 23	C Fuel Meter, Calculations		Y	Y
part 14	Oxidizing Catalyst and Selective Catalytic Reduction for S-203 (Basis: BACT, BAAQMD Reg. 2-5 [Toxics])						Y

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
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)	NOx 3.7 lb/hr, 3-hr average for each boiler	BAAQMD condition #14970, part 23	C CEM		Y	Y
part 17b	NOx concentration limits (Basis: BACT)	NOx 8.2 ppmv @ 3% O2, dry, 3-hr average	BAAQMD condition #14970, part 23	C CEM		Y	Y
part 17c	Hourly CO limit (Basis: PSD)	CO 3.0 lb/hr, 3-hr average for each boiler	BAAQMD condition #14970, part 23	C CEM		Y	Y
part 17d	CO concentration limit (Basis: BACT)	CO 11.0 ppmv @ 3% O2, dry, 3-hr average	BAAQMD condition #14970, part 23	C CEM		Y	Y
part 17e	Temperature limit for Oxidizing Catalyst (Basis: Reg. 2-5 [Toxics] for formaldehyde, benzene, and PAH's)	Temperature 430 degrees Fahrenheit	BAAQMD condition #14970, part 23	C Temperature Monitor		Y	N
part 17f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	NH3 20 ppmv, @ 15% O2, dry, averaged over 3 hrs	BAAQMD condition #14970, part 25	P/1-2 times per 5 years, Source Test		Y	N

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 17f	Ammonia limit (Basis: BAAQMD Reg. 2-5 [Toxics])	NH3 20 ppmv, @ 15% O2, dry, averaged over 3 hrs	BAAQMD condition #14970, part 25	P/E Calculations or source test		Y	N
part 18	Combined daily heat input rate for sources S-201 to S- 205 (Basis: PSD, CEC offsets)	Heat Input 57,544 MM btu/day, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ Fuel meter, calculations		Y	Y
part 19	Combined annual heat input rate for sources S-201 to S-205 (Basis: offsets)	Heat Input 19,023,000 MMBTU/yr, for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ Fuel meter, calculations		Y	Y
part 20	Combined daily emissions limits for sources S-201 to S-205 (Basis: CEC offsets, cumulative increase, PSD)						Y
part 20a	Combined daily NOx emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	NOx 969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 20b	Combined daily CO emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	CO 745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 20c	Combined daily POC emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	POC 352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 20c	Combined daily POC emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	POC 352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	Y
part 20d	Combined daily PM10 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	PM10 329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 20d	Combined daily PM10 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	PM10 329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A Source Test		Y	Y
part 20e	Combined daily SO2 emissions limits for sources S-201 through S-205 (Basis: CEC offsets, cumulative increase, PSD)	SO2 48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D Calculations		Y	Y
part 21	Combined annual emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)						Y
part 21a	Combined annual NOx emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	NOx 160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 21b	Combined annual CO emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	CO 73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	C/ CEM		Y	Y
part 21c	Combined annual POC emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	POC 48.45 ton/yr (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 21d	Combined annual PM10 emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	PM10 58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 21e	Combined annual SO2 emissions limits for sources S-201 through S-205 (Basis: Offsets, PSD, cumulative increase)	SO2 8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A Calculations		Y	Y
part 22	Combined annual emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])						N
part 22a	Combined annual formaldehyde emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Formaldehyde 4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 22b	Combined annual benzene emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Benzene 116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22b	Combined annual benzene emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	Benzene 116.1 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	N
part 22c	Combined annual PAH emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	PAH 78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A Calculations		Y	N
part 22c	Combined annual PAH emission limits for toxic air contaminants (Basis: BAAQMD Reg. 2-5 [Toxics])	PAH 78.7 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 29	P/Biannual Source Test		Y	N
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

Applicable Requirement	Regulation Title or Description of Requirement	Pollutant/Limit	Monitoring Citation	Monitoring Frequency/Type	Reporting Frequency	R	FE
part 28	Source tests - NH <sub>3</sub> (Basis: BAAQMD Reg. 2-5 [Toxics])						N
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)				As specified by regulation or permit condition		Y
part 31	Records (Basis: BAAQMD Reg. 2-6-501)					Y	Y
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Violation of any permit condition		N	Within 96 hours of violation		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 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 NOx, CO, or NH3) 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)

 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 NOx)

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)

- 7. The owner/operator shall not operate the HRSG unless the Gas Turbine is operating. (Basis: BACT for NOx, 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 NO2 and averaged over any rolling 3- hour period.

(Basis: PSD for NOx)

- 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 NOx)
- 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>)

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 exceed 3.7 pounds per hour, calculated as NO2 and averaged over any rolling 3- hour

period.

(Basis: PSD for NOx)

- 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 NOx)
- 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 (NH3) 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 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 NOx (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 PM10 per day

(Basis: PSD)

e. 48.5 pounds of  $SO_2$  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 NOx (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  $PM_{10}$  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

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 (NOx) 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.

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 NOx Concentrations, NOx Emissions measured as NO2, 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 NOx Emissions, CO Emissions, and Corrected NOx 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 NOx 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 NOx Concentrations, NOx 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 NOx 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 (PM10) Emissions, and Sulfur Dioxide (SO2) 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, PM10, and SO2 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, PM10, and SO2 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: 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 (NH3) Concentration and NH3 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 (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)
- 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 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 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. 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 VII Test Methods

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

### VII. Test Methods

### Table VII (continued) Test Methods

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
NSPS Subpart	Standards of Performance for	
Da	Electric Utility Steam Generating	
	Units for Which Construction Is	
	Commenced after September 18,	
	1978	
60.42Da	Particulate Limit	EPA Method 5, Determination of Particulate Emissions from
(a)(1)		Stationary Sources
60.42Da (b)	Opacity Limit	EPA Method 9, Visual Determination of the Opacity of Emissions
		from Stationary Sources
60.43Da	SO2 limit	EPA Method 19, Determination of Sulfur Dioxide Removal
(b)(2)		Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen
		Oxides Emission Rates
60.44Da	NOX limit	EPA Method 19, Determination of Sulfur Dioxide Removal
(a)(1)		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	NOX limit	None
(a)(1)(i)	Standards of Performance for	
Subpart GG	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

### VII. Test Methods

### Table VII (continued) Test Methods

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
BAAQMD		
Condition #		
14970		
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	None
	boiler	
part 12	Total daily heat input limit for	None
	S-203 to S-205, Boilers	
part 13	Total annual heat input limit for	None
	S-203 to S-205, Boilers	

### VII. Test Methods

### Table VII (continued) Test Methods

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
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
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	CARB Method 430
	for toxic air contaminants	
	(formaldehyde, benzene, and	
	specified PAHs)	

### XIII. 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 XIII
Permit Shield for Subsumed Requirements
S203, S204, S205– AUXILIARY STEAM BOILERS

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

### IX. REVISION HISTORY

Application No. 13143 Renewal November 18, 2008

 $Administrative\ Amendment:$ 

Application No. 22579

Change Responsible Officials December 1, 2010

Application No. 25420 Renewal August 28, 2014

Administrative Amendment:

Application No. 29168

Change Responsible Officials April 20, 2018

### X. 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

### X. 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

#### **NAAOS**

National Ambient Air Quality Standards

### **NESHAPS**

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

### **NMHC**

Non-methane Hydrocarbons

#### **NOx**

Oxides of nitrogen

### X. Glossary

### **NSPS**

Standards of Performance for New Stationary Sources - Federal standards for emissions from 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, NOx, PM10, and SO2.

### **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** 

### $PM_{10}$

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.

### X. Glossary

### $SO_2$

Sulfur dioxide

### Title V

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
$m^2$	=	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