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

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

## **Final**Proposed

## **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** 

**Facility Contact** 

Donald J. Curran, General Manager
Peter So, Plant Engineer

Mark D. Segel, Partner, Patrick Morris, Environmental Coordinator

Pacific Crockett Energy, LLC Chris Sargent, Environmental Coordinator

<u>510-787-4100</u>510-292-7005 <u>510-787-4105</u>510-787-4101

**Type of Facility:** Cogeneration BAAQMD Permit

**Division Contact:** 

**Primary SIC:** 4913 Doug Hall

**Product:** Electricity and Steam Kathleen Truesdell

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

Signed by-Ellen Garvey

Ellen Garvey Jack P. Broadbent, Executive Officer/Air Pollution Control Officer 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 11/15/005/02/017/19/2006); SIP Regulation 1 - General Provisions and Definitions (as approved by EPA through 8/27/996/28/1999); BAAQMD Regulation 2, Rule 1 - Permits, General Requirements (as amended by the District Board on <del>11/15/008/01/01</del>7/19/2006); SIP Regulation 2, Rule 1 - Permits, General Requirements (as approved by EPA through  $\frac{2/25/1999}{1/26/1999}$ ); BAAQMD Regulation 2, Rule 2 - Permits, New Source Review (as amended by the District Board on  $\frac{5}{17}$ /006/15/2005); SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration (as approved by EPA through 2/25/19991/26/1999); BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking (as amended by the District Board on <u>5/17/0012/21/2004</u>); SIP Regulation 2, Rule 4 - Permits, Emissions Banking (as approved by EPA through 2/25/19991/26/1999); and BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review (as amended by the District Board on <del>10/20/995/02/014/16/2003</del>); 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 March 7, 2001 [ ] and expires on February 28, 2006 [when issued, enter 5<sup>th</sup> anniversary of issue date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than September 1, 2005 [when issued, enter date 6 months prior to permit expiration date] and no earlier than February 28, 2005 [when issued, enter date 12 months prior to expiration date]. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after [when issued, enter 5<sup>th</sup> anniversary of issue date]. If the permit renewal has not been issued by [ ]—, 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. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after February 28, 2006.

(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

permit terminatingon, revokingeation and reissuingance, or modifying the

<u>permitication</u>; or denial of a permit renewal application.

(Basis: Regulation 2-6-307, 409.8; MOP Volume II, Part 3, §4.11)

3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action.

(Basis: MOP Volume II, Part 3, §4.11)

- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Basis: Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition.

  (Basis: Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 6. This permit does not convey any property rights of any sort, nor any exclusive privilege.

(Basis: Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)

- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Basis: Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit that the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code.

(Basis: Regulation 2-6-419; MOP Volume II, Part 3, §4.11)

9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information.

(Basis: 40 CFR Part 2)

- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (Basis: MOP Volume II, Part 3, §4.11)
- 11. -The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility.

(Basis: Regulation 2-6-409.20)

12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors.

(Basis: Regulation 2-6-307)

#### C. Requirement to Pay Fees

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

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

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

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

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

#### E. Records

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

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

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

(Basis: Regulation 2-6-501, Regulation 3; 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. The first reporting period for this permit shall be March 7, 2001 to August 31, 2001. The report shall be submitted by September 30, 2001. Subsequent reports shall be for the following periods: September 1st through February 28<sup>th</sup> or 29<sup>th</sup> and March 1st through August 31<sup>st</sup>-, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109

Attn: Title V Reports

#### **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 permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

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

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

#### **H.** Emergency Provisions

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

2.(Basis: MOP Volume II, Part 3, §4.8)

- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (Basis: MOP Volume II, Part 3, §4.8)
- Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement.

(Basis: MOP Volume II, Part 3, §4.8)

#### I. Severability

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

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

#### 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** 

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	<del>Forney</del>	Unknown	<del>349</del> <u>288.9</u> MM
	Duct Burner	CorporationCoen with		BTU/hr (HHV)
	(natural gas)	low NOx burner		
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 (continued)

## **B.** Abatement Device List

Table II-B

		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
			Reg2	550 °F	avg; ≤ 10
			Rule5 <sub>1</sub> BACT,		ppmv at 15%
			$\overline{\text{TRMP}}_{1}$		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;
					$NH_3 \le 20$
					ppmv at 15%
					O <sub>2</sub> , dry, 3 hr
					avg
A-203	Oxidation Catalyst	S-203	BACT,	Minimum Operating	CO emissions
			BAAQMD	Temperature of	shall not
			Reg2 Rule5 2-	430 °F	exceed 3.0
			$\underline{5}_{1}$ BACT,		lbs/hr avgd
			$\frac{TRMP_1}{TRMP_2}$		over 3 hours
					nor 11.0
					ppmv at 3%
					O <sub>2</sub> dry basis
					avgd over 3
					hours

# II. Equipment List (continued)

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

Table II-B

		Source(s)	Applicable	Operating	Limit or
A-#	Description	Controlled	Requirement	Parameters	Efficiency
A-204	Selective Catalytic	S-203	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;
					$NH_3 \le 20$
					ppmv at 3%
					O <sub>2</sub> , dry, 3 hr
					avg
A-205	Oxidation Catalyst	S-204	BACT,	Minimum Operating	CO ≤ 3.0
			<u>BAAQMD</u>	Temperature of	lbs/hr, 3 hr
			Reg2 Rule5 2-	430 °F	avg; ≤ 11.0
			$\underline{5}_{1}$ BACT,		ppmv at 3%
			TRMP		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%
					$O_{2}$ , dry, 3 hr
					avg
A-207	Oxidation Catalyst	S-205	BACT,	Minimum Operating	CO ≤ 3.0
			TRMP <sub>1</sub> BAAQ	Temperature of	lbs/hr, 3 hr
			MD Reg2	430 °F	avg; ≤ 11.0
			Rule52-5 <sub>1</sub>		ppmv at 3%
					O <sub>2</sub> , dry, 3 hr
					avg

# II. Equipment List (continued)

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

Table II-B

<b>A-</b> #	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
A-208	Selective Catalytic Reduction System	S-205	BACT	None	$NOx \le 3.7$ $lbs/hr, 3 hr$
					avg; $\leq 8.2$ ppmv at 3%
					$O_2$ , dry, 3 hr; $NH_3 \le 20$
					ppmv at 3% O <sub>2</sub> , dry, 3 hr
					avg

<sup>&</sup>lt;sup>1</sup>Toxics Risk Management Plan

## 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 parentheseis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. <u>For BAAQMD</u> regulation(s):
  The date(s) of adoption or most recent amendment of the regulation by the District Board
- 2. <u>For aAny federal requirement, including a version of a District regulation that has been approved into the SIP:</u>

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 SIP requirements is on EPA Region 9's website. The address is includprovided at the end of this permit in Appendix A of this permit. The full language of SIP requirements is included in Appendix A of this permit if the SIP requirement is different from the current BAAQMD requirement.

#### **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

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (11/15/007/19/2006)	N
SIP Regulation 1	General Provisions and Definitions (8/27/1999)6/28/1999)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (7/19/2006)	<u>N</u>

# III. Generally Applicable Requirements (continued)

Table III

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 2, Rule 1	General Requirements (1/26/1999)	<u>Y</u>
BAAQMD · Regulation 2 · Rule 2	Permits, New Source Review (06/15/2005)	<u>N</u>
SIP Regulation 2 · Rule 2	Permits, New Source Review (01/26/1999)	<u>Y</u>
BAAQMD · Regulation 2 · Rule 3	Permits, Power Plants (12/19/1979)	<u>Y</u>
BAAQMD · Regulation 2 · Rule 4	Permits, Emissions Banking (12/21/2004)	<u>N</u>
SIP Regulation 2 · Rule 4	Permits, Emissions Banking (01/26/1999)	<u>Y</u>
BAAQMD Regulation 2, Rule 5	New Source Review of Toxic Air Contaminants (6/15/2005)	<u>N</u>
BAAQMD · Regulation 2 · Rule 6	Permits, Major Facility Review (04/16/2003)	<u>N</u>
SIP Regulation 2 · Rule 6	Permits, Major Facility Review (06/23/1995)	<u>Y</u>
BAAQMD · Regulation 2 · Rule 9	Permits, Interchangeable Emission Reduction Credits (6/15/2005)	<u>N</u>
BAAQMD · Regulation 3	Fees (06/06/2007)	<u>N</u>
SIP· Regulation 3	Fees (05/03/1984)	<u>Y</u>
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/ <u>19</u> 91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/ <u>19</u> 90)	Y
BAAQMD Regulation 5	Open Burning ( <del>11/2/94</del> 03/06/2002)	N
SIP Regulation 5	Open Burning (9/4/1998)	<u>Y</u>
BAAQMD Regulation 6, Rule 1	Particulate Matter-and Visible Emissions (12/19/199012/05/2007)	N
SIP Regulation 6	Particulate Matter and Visible Emissions (12/19/1990)	<u>Y</u>
BAAQMD Regulation 7	Odorous Substances (3/17/ <u>19</u> 82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/ <u>19</u> 94)	Y
BAAQMD Regulation 8, Rule 2	Miscellaneous Operations (7/20/2005)	<u>N</u>
SIP Regulation 8, Rule 2	Miscellaneous Operations (03/22/1995)	<u>Y</u>
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/9511/21/2001)	Y
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (06/15/2005)	<u>N</u>

# III. Generally Applicable Requirements (continued)

## Table III

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (04/19/2001)	<u>Y</u>
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor  Extraction Operations (6/15/2005)	<u>N</u>
SIP Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor  Extraction Operations (04/26/1995)	<u>Y</u>
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/ <u>19</u> 95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/ <u>19</u> 95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/9507/17/2002)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/2002)	<u>Y</u>
BAAQMD Regulation 9, Rule 1	<u>Sulfur Dioxide (3/15/1995)</u>	<u>N</u>
SIP Regulation 9, Rule 1	<u>Sulfur Dioxide (06/08/1999)</u>	<u>Y</u>
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/9110/7/1998)	<u>¥N</u>
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/ <u>19</u> 90)	¥ <u>N</u>
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/02/1981)	<u>Y</u>
California Health and Safety Code Section 41750 et seq.	Portable Equipment	<u>N</u>
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	<u>N</u>
California Health and Safety Code Section 93115 et seq.	Airborne Toxic Control Measure for Stationary  Compression Ignition Engines	N
40 CFR Part 61, Subpart M	National Emission Standards Hazardous Air Pollutants, Asbestos	<u>Y</u>
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone ( <u>03/12/20042/21/19</u> 95)	Y
Subpart F, 40 CFR 82.156	Recycling and Emissions Reductions - Required Practices (04/13/2005)Leak Repair	Y

# III. Generally Applicable Requirements (continued)

## Table III

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

## IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP (State Implementation Plan) 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 parentheseis 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. <u>For aAny federal requirement, including a version of a District regulation that has been approved into the SIP:</u>
  - 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 SIP requirements is on EPA Region 9's website. The address is included provided at the end of this permit in Appendix A of this permit. The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is included in Appendix A of this permit if the SIP requirements are different from the current BAAQMD requirements. All other text may be found in the regulations themselves.

Table IV-A S-201 - GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	General Provisions and Definitions (11/3/937/19/2006)		
Regulation 1			
<u>1-520</u>	Continuous Emission Monitoring	<u>Y</u>	
1-520.8	Continuous Emission Monitoring (Monitors Pursuant to 2-1-403)	<u>Y</u>	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	<u>¥N</u>	
1-523	Parametric Monitoring and Recordkeeping Procedures	<u>¥N</u>	
<u>1-602</u>	Area and Continuous Emission Monitoring Requirements	<u>N</u>	
SIP·	General Provisions and Definitions (SIP Approved) (10/07/1998)		
Regulation 1			
<u>1-522</u>	Continuous Emission Monitoring and Recordkeeping Procedures	<u>Y</u>	
<u>1-522.7</u>	Emission Limit Exceedance Reporting Requirements	<u>Y</u>	
<u>1-523</u>	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	
<u>1-523.3</u>	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	

### Table IV-A S-201 - GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Particulate Matter and Visible Emissions (12/19/199012/05/2007)		
Regulation 6,			
Rule 1			
6- <u>1-</u> 301	Ringelmann Number 1 Limitation	N	
6- <u>1-</u> 305	Visible Particles	<u>¥N</u>	
6- <u>1-</u> 310	Particulate Weight Limitation	<u>¥N</u>	
<u>6-1-310.3</u>	Heat Transfer Operations	<u>N</u>	
6- <u>1-</u> 401	Appearance of Emissions	<u>¥N</u>	
<u>SIP</u>	Particulate Matter and Visible Emissions (12/19/1990)		
Regulation 6			
<u>6-301</u>	Ringelmann Number 1 Limitation	<u>Y</u>	
<u>6-305</u>	<u>Visible Particles</u>	<u>Y</u>	
<u>6-310</u>	Particulate Weight Limitation	<u>Y</u>	
<u>6-310.3</u>	Heat Transfer Operations	<u>Y</u>	
<u>6-401</u>	Appearance of Emissions	<u>Y</u>	
BAAQMD			
Regulation 9,	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/ <u>19</u> 95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	<u>NY</u>	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas		
Regulation 9,	Turbines (9/21/9412/6/2006)		
Rule 9		101	
9-9-113	Exemption – Inspection/Maintenance	<u>¥N</u>	
9-9-114	Exemption – Start-Up/Shutdown	¥ <u>N</u>	
9-9-301	Emission Limits, General	¥ <u>N</u>	
9-9-301. <u>1.</u> 3	Emission Limits, Turbines greater than 10 MW with SCR, NOx less than 9	<u>¥N</u>	
	ppmv (dry, 15% O2)Emission Limits Turbines Rated ≥ 10 MW w/SCR		
<u>9-9-401</u>	Certification, Efficiency	<u>N</u>	
9-9-501	Monitoring and recordkeeping requirements	<u>¥N</u>	
<u>9-9-601</u>	Determination of Emissions	<u>N</u>	
9-9-602	Determination of Stack Gas Oxygen	<u>Y</u>	
<u>9-9-604</u>	Determination of HHV and LHV	<u>N</u>	

Table IV-A S-201 - GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
SIP	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas		
Regulation 9,	<u>Turbines (12/15/1997)</u>		
Rule 9			
<u>9-9-113</u>	Exemption – Inspection/Maintenance	<u>Y</u>	
<u>9-9-114</u>	Exemption – Start-Up/Shutdown	<u>Y</u>	
<u>9-9-301</u>	Emission Limits, General	<u>Y</u>	
<u>9-9-301.3</u>	Emission Limits, Turbines greater than 10 MW with SCR, NOx less than 9 ppmv (dry, 15% O2)	<u>Y</u>	
9-9-401	Certification, Efficiency	<u>Y</u>	
9-9-501	Monitoring and recordkeeping requirements	<u>Y</u>	
9-9-601	Determination of Emissions	<u>Y</u>	
9-9-604	Determination of HHV and LHV	<u>Y</u>	
BAAQMD ·	NSPS Incorporation by Reference, Stationary Gas Turbines		
Regulation	(2/16/2000)		
10 Subpart			
<u>GG</u>			
<u>10-40</u>	Subpart GG. Standards of Performance For Stationary Gas Turbines	<u>N</u>	
40 CFR 60	Standards of Performance for New Stationary Sources	Y	
	( <del>12/23/<u>19</u>71</del> <u>5/6/2008</u> )		
Subpart A	<b>General Provisions</b>	Y	
60.4(a)	Reports to EPA	<u>Y</u>	
60.4(b)	Reports to District	<u>Y</u>	
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines		
	( <del>1/27/82</del> <u>2/24/2006</u> )		
60.330(a)	Applicable to Stationary Gas Turbines greater than 10 MM Btu/hr	<u>Y</u>	

Table IV-A S-201 - GAS TURBINE

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
60.330(b)	Applicable to Facilities Constructed after October 3, 1977	<u>Y</u>	
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO <sub>2</sub>	Y	
60.333(b)	Fuel Sulfur Content cannot exceed 0.8 percent by weight	<u>Y</u>	
60.334(c)	NOx CEMs	<u>Y</u>	
60.334(b)(2)	Sulfur and nitrogen content of fuel	¥	
60.334(h)(3)	Exemption from sulfur fuel monitoring requirements (Natural Gas)	<u>Y</u>	
60.334(j)(1	NOx Excess Emissions and Monitor Downtime reporting requirements	<u>Y</u>	
(iii)			
60.335	Test Methods and Procedures	Y	
BAAQMD			
Condition			
#14970			
part 1	Exclusive use of PUC-quality natural gas (Basis: BACT for SO <sub>2</sub> and	Y	
	$PM_{10}$ )		
part 2	Hourly heat input limit for turbine (Basis: cumulative increase)	Y	
part 4	Hourly heat input limit for turbine and HRSG ( <u>Basis:</u> PSD for NO <sub>x</sub> )	Y	
part 5	Daily heat input limit for turbine and HRSG (Basis: PSD for PM <sub>10</sub> )	Y	
part 6	Annual heat input limit for turbine and HRSG (Basis: offsets)	Y	
part 8	Oxidizing Catalyst and Selective Catalytic Reduction (Basis: BACT,	Y	
	TRMPBAAQMD Reg. 2-5 [Toxics])		
part 9a	Hourly NOx limit (Basis: PSD)	Y	
part 9b	NOx concentration limit (Basis: BACT)	Y	
part 9c	Hourly CO limit (Basis: PSD)	Y	
part 9d	CO concentration limit ( <u>Basis:</u> BACT)	Y	
part 9e	Temperature limit for Oxidizing Catalyst	Y	
	(Basis: TRMPBAAQMD Reg. 2-5 [Toxics] for formaldehyde, benzene,		
	and PAH's)		
part 9f	Ammonia limit (Basis: TRMPBAAQMD Reg. 2-5 [Toxics])	Y	
part 18	Combined daily heat input rate for sources S-201 through S-205	Y	
-	( <u>Basis:</u> PSD, CEC offsets)		
part 19	Combined annual heat input rate for sources S-201 through S-205 (Basis:	Y	
-	Offsets)		

### Table IV-A S-201 - GAS TURBINE

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

Table IV-B S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable Requirement	Regulation Title or  Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD			
Regulation 1	General Provisions and Definitions (11/3/9305/02/2001)		
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NOx, CO <sub>2</sub> or O <sub>2</sub>	Y	
<u>1-520.8</u>	Continuous Emission Monitoring (Monitors Pursuant to 2-1-403)	<u>Y</u>	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	<u>¥N</u>	
1-523	Parametric Monitoring and Recordkeeping Procedures	<u>¥N</u>	
1-602	Area and Continuous Emission Monitoring Requirements	<u>¥N</u>	
<u>SIP·</u>	General Provisions and Definitions (SIP Approved)		
Regulation 1	<u>(10/07/-1998)</u>		
<u>1-522</u>	Continuous Emission Monitoring and Recordkeeping Procedures	<u>Y</u>	
<u>1-522.7</u>	Emission Limit Exceedance Reporting Requirements	<u>Y</u>	
<u>1-523</u>	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	
<u>1-523.3</u>	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 - Permits, General Requirements		
Rule 1	( <del>6/7/<u>19957/19/2006)</u></del>		
2-1-501	Monitors	Y	
BAAQMD	Particulate Matter and Visible Emissions (12/19/199012/05/2007)		
Regulation 6.			
Rule 1 6-1-301	Ringelmann Number 1 Limitation	Y	
6- <u>1-</u> 304	Tube Cleaning	Y	
6- <u>1-</u> 305	Visible Particles	Y	
6- <u>1-</u> 310	Particulate Weight Limitation	Y	
6- <u>1-</u> 310.3	Heat Transfer Operations	Y	
6- <u>1-</u> 401	Appearance of Emissions	Y	
SIP	Particulate Matter and Visible Emissions (12/19/1990)		
Regulation 6			
6-301	Ringelmann Number 1 Limitation	<u>Y</u>	
6-305	Visible Particles	<u>Y</u>	

Table IV-B S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
<u>6-310</u>	Particulate Weight Limitation	<u>Y</u>	
6-310.3	Heat Transfer Operations	<u>Y</u>	
<u>6-401</u>	Appearance of Emissions	<u>Y</u>	
BAAQMD			
Regulation 9,	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/ <u>19</u> 95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat		
Regulation	Transfer Operations (3/17/ <u>19</u> 82)		
9, Rule 3			
9-3-303	New or Modified Heat Transfer Operation Limits	<u>NY</u>	
<u>9-3-601</u>	Determination of Nitrogen Oxides	<u>N</u>	
BAAQMD ·	Inorganic Gaseous Pollutants, NOx and CO from Utility Electric		
Regulation 9	Power Gen Boilers (5/17/2000)		
<u>Rule 11</u>			
<u>9-11-114</u>	Exemption, Heat Recovery Steam Generators	<u>Y</u>	
BAAQMD ·	NSPS Incorporation by Reference, Electric Utility Steam		
Regulation 10	Generating Units		
Subpart Da	(2/16/2000)		
<u>10-3</u>	Subpart Da. Standards of Performance For Electric Utility Steam	<u>N</u>	
	Generating Units for Which Construction is Commenced After		
	<u>September 18, 1978</u>		
	(24-hour maximum emissions averaging periods)		
40 CFR 60	Standards of Performance for New Stationary Sources	Y	
	( <del>12/23/<u>19</u>71</del> <u>5/6/2008</u> )		
Subpart A	General Provisions	Y	
60.4(a)	Reports to EPA	<u>Y</u>	
60.4(b)	Reports to EPA and District	Y	
60.7	Notification and record keeping	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	

Table IV-B S-202 – HEAT RECOVERY STEAM GENERATOR

_		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
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	Y	
	Units for Which Construction Is Commenced after September 18, 1978 (6/14/796/13/2007)		
60.40 Da(a)	Applicability	<u>Y</u>	
60.42 <u>D</u> a(a)(1)	Particulate Limit	Y	
60.42 <u>D</u> a(b)	Opacity Limit	Y	
60.43 <u>D</u> a(b)(2)	SO2 limit	Y	
60.43 <u>D</u> a(g)	Averaging (24 hour for Bay Area) 30-day rolling average basis	Y	
60.44 <u>D</u> a(a)(1)	NOX limit	Y	
60. <del>46a</del> 48Da(a)	Compliance, particulate limitation	Y	
60.46a48Da(b)	Compliance, NOX limitation	Y	
60. <del>46a</del> 48Da(c)	Applicability of Limits	Y	
60.47a(f)	Availability of information	¥	
60.49Da(b)	Exemption from SO2 CEMs for natural gas fired units	<u>Y</u>	
60.49Da(o)	Exemption from NOx CEMs for duct burners	<u>Y</u>	
60.49Da(u)(2)	Exemption from continuous opacity monitoring system requirements	<u>Y</u>	
60.48a <u>60.50Da</u>	Compliance determination procedures and methods	Y	
60.49a(a)60.51	Performance test reports	Y	
Da(a)			
60.49a(b)	NOX emission reports	¥	
60.49a(c)	Reports regarding lack of minimum data	¥	
<del>60.49a(d)</del>	Exceedances during emergency conditions	¥	
60.49a(f)	Reports regarding data availability	¥	
60.49a(g)	Signed statements	¥	
<del>60.49a(h)</del>	Opacity exceedance definition	¥	
60.49a(i)	Reports to Administrator (Also required to District)	¥	

Table IV-B S-202 – HEAT RECOVERY STEAM GENERATOR

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Condition			
#14970			
part 1	Exclusive use of PUC-quality natural gas	Y	
	( <u>Basis:</u> BACT for SO <sub>2</sub> and PM <sub>10</sub> )		
part 3	Hourly heat input limit for HRSG (Basis: cumulative increase)	Y	
part 4	Hourly heat input limit for turbine and HRSG ( <u>Basis:</u> PSD for NO <sub>x</sub> )	Y	
part 5	Daily heat input limit for turbine and HRSG (Basis: PSD for PM <sub>10</sub> )	Y	
part 6	Annual heat input limit for turbine and HRSG (Basis: offsets)	Y	
part 7	Turbine must operate during HRSG operation	Y	
	( <u>Basis:</u> BACT for NOx, CO, and POC)		
part 8	Oxidizing Catalyst and Selective Catalytic Reduction	Y	
	(Basis: BACT, TRMPBAAQMD Reg. 2-5 [Toxics])		
part 9a	Hourly NOx limit (Basis: PSD)	Y	
part 9b	NOx concentration limit (Basis: BACT)	Y	
part 9c	Hourly CO limit ( <u>Basis:</u> PSD)	Y	
part 9d	CO concentration limit ( <u>Basis:</u> BACT)	Y	
part 9e	Temperature limit for Oxidizing Catalyst	Y	
	(Basis: TRMPBAAQMD Reg. 2-5 [Toxics] for formaldehyde,		
	benzene, and PAH's)		
part 9f	Ammonia limit ( <u>Basis: TRMPBAAQMD Reg. 2-5 [Toxics]</u> )	Y	
part 18	Combined daily heat input rate for sources S-201 through S-205	Y	
	(Basis: PSD, CEC offsets)		
part 19	Combined annual heat input rate for sources S-201 through S-205	Y	
	( <u>Basis:</u> Offsets)		
part 20	Combined daily emissions limits for sources S-201 through S-205	Y	
	( <u>Basis:</u> CEC offsets, cumulative increase, PSD)		
part 21	Combined annual emissions limits for sources S-201 through S-205	Y	
	( <u>Basis:</u> Offsets, PSD, cumulative increase)		
part 22	Combined annual emission limits for toxic air contaminants ( <u>Basis:</u>	N	
	TRMPBAAQMD Reg. 2-5 [Toxics])		

Table IV-B S-202 – HEAT RECOVERY STEAM GENERATOR

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
part 23	Continuous monitoring	Y	
	(Basis: BAAQMD Reg. 1-520.1 and, 9-9-501, BACT, offsets,		
	NSPS, PSD, cumulative increase)		
part 24	Emission calculations (Basis: offsets, PSD, cumulative increase)	Y	
part 25	Ammonia emission calculations or source test (Basis:	N	
	TRMPBAAQMD Reg. 2-5 [Toxics])		
part 26	Toxic air contaminant emission calculations (Basis:	N	
	TRMPBAAQMD Reg. 2-5 [Toxics])		
part 27	Source tests - water content, stack gas, O2, POC, PM10	Y	
	( <u>Basis:</u> offsets, PSD)		
part 27	Source tests - NH <sub>3</sub> ( <u>Basis: TRMPBAAQMD Reg. 2-5 [Toxics]</u> )	N	
part 29	Source tests - toxic air contaminants (Basis: TRMPBAAQMD Reg.	N	
	<u>2-5 [Toxics]</u> )		
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)	Y	
part 31	Records ( <u>Basis: BAAQMD</u> Reg. 2-6-501)	Y	
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Y	

Table IV-C S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (11/3/937/19/2006)		
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NOx, CO <sub>2</sub> or O <sub>2</sub>	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	<u>¥N</u>	
1-523	Parametric Monitoring and Recordkeeping Procedures	<u>¥N</u>	
1-602	Area and Continuous Emission Monitoring Requirements	<u>¥N</u>	
SIP	General Provisions and Definitions (6/28/99)		
Regulation 1			
<u>1-522</u>	Continuous Emission Monitoring and Recordkeeping Procedures	<u>Y</u>	
<u>1-522.7</u>	Monitor excesses	<u>Y</u>	
<u>1-523</u>	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	
<u>1-523.3</u>	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 - Permits, General Requirements		
Rule 1	( <del>6/7/95</del> <u>7/19/2006</u> )		
2-1-501	Monitors	Y	
BAAQMD	Particulate Matter and Visible Emissions (12/19/199012/05/2007)		
Regulation 6,			
Rule 1			
6- <u>1-</u> 301	Ringelmann Number 1 Limitation	Y	
6- <u>1-</u> 304	Tube Cleaning	Y	
6- <u>1-</u> 305	Visible Particles	Y	
6- <u>1-</u> 310	Particulate Weight Limitation	Y	
6- <u>1-</u> 310.3	Heat Transfer Operations	Y	
6- <u>1-</u> 401	Appearance of Emissions	Y	
SIP	Particulate Matter and Visible Emissions (12/19/1990)		
Regulation 6			
<u>6-301</u>	Ringelmann Number 1 Limitation	<u>Y</u>	
<u>6-305</u>	<u>Visible Particles</u>	<u>Y</u>	
<u>6-310</u>	Particulate Weight Limitation	<u>Y</u>	

Table IV-C S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
6-310.3	Heat Transfer Operations	<u>Y</u>	Date
<u>6-401</u>	Appearance of Emissions	<u> </u>	
BAAQMD	Typediance of Emissions		
Regulation 9,	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/1995)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD	Inorganic Gaseous Pollutants, Nitrogen Oxides From Heat		
Regulation	Transfer Operations (3/17/ <u>19</u> 82)		
9, Rule 3			
9-3-303	New or Modified Heat Transfer Operation Limits	<u>NY</u>	
BAAQMD	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon		
Regulation 9,	Monoxide from Industrial, Institutional, and Commercial		
Rule 7	Boilers, Steam Generators, and Process Heaters (9/15/ <u>19</u> 93)		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NOx	Y	
9-7-301.2	Emission Limits-CO	Y	
9-7-503	Records	Y	
9-7-503.4	Source test records	Y	
BAAQMD ·	NSPS Incorporation by Reference, Fossil-Fuel-Fired Steam		
Regulation	<u>Generators (12/20/1995)</u>		
10 Subpart			
<u>Db</u>			
<u>10-4</u>	Subpart Db. Standards of Performance For Industrial-Commercial-	<u>N</u>	
	Institutional Steam Generating Units		
	(24-hour maximum emissions averaging periods)		
<b>BAAQMD</b>	Hazardous Pollutants, Lead (3/17/1982)		
Regulation			
11, Rule 1			
<u>11-1-301</u>	Daily Limitation	<u>Y</u>	
11-1-302	Ground level Concentration Limit Without Background	<u>Y</u>	
40 CFR 60	Standards of Performance for New Stationary Sources	Y	
	( <del>12/23/<u>19</u>71</del> <u>5/6/2008</u> )		

Table IV-C S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
Subpart A	General Provisions	Y	
60.4(a)	Reports to EPA	<u>Y</u>	
60.4(b)	Reports to EPA and District	Y	
60.7	Notification and record keeping	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11	Compliance with standards and maintenance requirement	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.19	General notification and reporting requirements	Y	
Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam	¥	
	Generators for Which Construction Is Commenced after August		
	<del>17, 1971 (7/25/<u>19</u>77)</del>		
60.42(a)(1)	Particulate limit	¥	
60.42(a)(2)	Opacity Limit	¥	
60.46(b)	Test Methods and Procedures	¥	
Subpart Db	Standards of Performance for Industrial-Commercial-	Y	
	Institutional Steam Generating Units (12/16/876/13/2007)		
60.40b(a)	Applicability	<u>Y</u>	
60.44b	NOX limit	Y	
(a)(1)(i)	NO P. to P. H. d. H.:		
60.44b(h)	NOx limit applicable at all times	Y	
60.44b <del>(j)</del> (i)	Compliance: 24 hr day basis 30-day rolling average basis	Y	
60.46b(a)	NOx limit applicable at all times	Y	
60.46b(c)	Compliance with NOX limit	Y	
60.46b(e)	Performance test for NOX	Y	
60.46b(e)(1)	Performance test for NOX (24-hr basis)	Y	
60.48b(1)	NOx CEM	<u>Y</u>	
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	

Table IV-C S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
60.49b(h)(2)	Excess emission reports	Y	
60.49b(i)	Submittal of records	<u>Y</u>	
60.49b(o)	Records retention for two years	<u> </u>	
BAAQMD	-		
Condition			
#14970			
Part 10	Exclusive use of natural gas ( <u>Basis:</u> BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 11	Hourly heat input limit for each boiler (Basis: cumulative increase)	Y	
part 12	Total daily heat input limit for S-203 to S-205, Boilers (Basis: PSD for PM <sub>10</sub> )	Y	
part 13	Total annual heat input limit for S-203 to S-205, Boilers ( <u>Basis:</u> offsets)	Y	
part 14	Oxidizing Catalyst and Selective Catalytic Reduction for S-203  (Basis: BACT, TRMPBAAQMD Reg. 2-5 [Toxics])	Y	
part 15	Oxidizing Catalyst and Selective Catalytic Reduction for S-204  (Basis: BACT, TRMPBAAQMD Reg. 2-5 [Toxics])	Y	
part 16	Oxidizing Catalyst and Selective Catalytic Reduction for S-205 (Basis: BACT, TRMPBAAQMD Reg. 2-5 [Toxics])	Y	
part 17a	Hourly NOx limits (Basis: PSD)	Y	
part 17b	NOx concentration limits (Basis: BACT)	Y	
part 17c	Hourly CO limit (Basis: PSD)	Y	
part 17d	CO concentration limit (Basis: BACT)	Y	
part 17e	Temperature limit for Oxidizing Catalyst  ( <u>Basis: TRMP Reg. 2-5 [Toxics]</u> for formaldehyde, benzene, and PAH's)	Y	
part 17f	Ammonia limit ( <u>Basis: TRMPBAAQMD Reg. 2-5 [Toxics]</u> )	Y	
part 18	Combined daily heat input rate for sources S-201 to S-205 (Basis: PSD, CEC offsets)	Y	
part 19	Combined annual heat input rate for sources S-201 to S-205 (Basis: offsets)	Y	
part 20	Combined daily emissions limits for sources S-201 to S-205 (Basis: CEC offsets, cumulative increase, PSD)	Y	

Table IV-C S-203, S-204, & S-205 – AUXILIARY STEAM BOILERS

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
part 21	Combined annual emissions limits for sources S-201 to S-205	Y	
	(Basis: offsets, PSD, cumulative increase)		
part 22	Combined annual emission limits for toxic air contaminants (Basis:	N	
	TRMPBAAQMD Reg. 2-5 [Toxics])		
part 23	Continuous monitoring	Y	
	(Basis: BAAQMD Reg. 1-520.1, and 9-9-501, BACT, offsets,		
	NSPS, PSD, cumulative increase)		
part 24	Emission calculations (Basis: offsets, PSD, cumulative increase)	Y	
part 25	Ammonia emission calculations or source test (Basis:	N	
	TRMPBAAQMD Reg. 2-5 [Toxics])		
part 26	Toxic air contaminant emission calculations (Basis:	N	
	TRMPBAAQMD Reg. 2-5 [Toxics])		
part 28	Source tests - water content, stack gas, O <sub>2</sub> , POC, PM <sub>10</sub>	Y	
	( <u>Basis:</u> offsets for POC, PSD for PM <sub>10</sub> )		
part 28	Source tests - NH <sub>3</sub> ( <u>Basis: TRMPBAAQMD Reg. 2-5 [Toxics]</u> )	N	
part 30	Reports (Basis: BAAQMD Reg. 2-6-502)	Y	
part 31	Records (Basis: BAAQMD Reg. 2-6-501)	Y	
part 32	Violation reporting (Basis: BAAQMD Reg. 1-522.7)	Y	

#### V. SCHEDULE OF COMPLIANCE

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

#### VI. PERMIT CONDITIONS

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

### A. Source-Specific Permit Conditions

#### **Condition #14970**

Permit Conditions for Plant #8664:

Crockett Cogeneration, A California Limited Partnership;

<u>Including</u>: 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

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

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.

#### TRMP: Toxics Risk Management Plan

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

- 1. The owner/operator shall fire S-201 Gas Turbine and S-202 Heat Recovery Steam Generator (HRSG) shall be fired 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 shall not exceed 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 shall not exceed to no more than 349288.9 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 shall not exceed to no more than 2,129 million BTU per hour, averaged over any rolling 3-hour period.

  (Basis: (PSD for NOx)
- 5. The <u>owner/operator shall limit the</u> combined heat input rate to the Gas Turbine and HRSG shall not exceed to no more than 51,096 million BTU per calendar day.

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

(Basis: (PSD for PM<sub>10</sub>)

- 6. The owner/operator shall limit the combined heat input rate to the Gas Turbine and HRSG shall not exceed to no more than 15,613,000 million BTU per calendar year. (Basis: (Offsets)
- 7. The owner/operator shall not operate the HRSG shall not be operated unless the Gas Turbine is operating.

(Basis: (BACT for NOx, CO, POC)

- 8. The owner/operator shall abate the Gas Turbine and HRSG shall be abated by 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]TRMP)
- 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], TRMP, 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.

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

(Basis: (BAAQMD Regulation 2, Rule 5 [Toxics]TRMP\_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]TRMP for NH<sub>3</sub>)

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

<u>10.</u>-The <u>owner/operator shall fire the Auxiliary Boilers (S-203, S-204, and S-205) shall be fired on natural gas exclusively.</u>

(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) shall not exceed 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) shall not exceed 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) shall not exceed to no more than 6,575,000 million BTU per calendar year. (Basis: (Offsets)
- 14. The <u>owner/operator shall abate the S-203 Auxiliary Boiler shall be abated by with the</u> properly operated and properly maintained Oxidizing Catalyst (A-203) and Selective Catalytic Reduction System (A-204), <u>used in series</u>.

  (Basis: (BACT and BAAQMD Regulation 2, Rule 5 [Toxics]TRMP)
- 15. The owner/operator shall abate the S-204 Auxiliary Boiler shall be abated by 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]TRMP)
- 16. The owner/operator shall abate the S-205 Auxiliary Boiler shall be abated by 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](BACT and TRMP)

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

<u>17.</u> 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], TRMP, 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: (TRMPBAAQMD 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](TRMP 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) shall not exceed to no more than 57,544 million BTU per calendar day.

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

(Basis: (PSD, CEC Offsets)

- 19. The <u>owner/operator shall limit the</u> combined heat input rate to the Gas Turbine (S-201), HRSG (S-202), and Auxiliary Boilers (S-203, S-204, and S-205) <u>shall not exceed to no more than</u> 19,023,000 million BTU per calendar year. (Basis: (Offsets)
- 20. The <u>owner/operator shall limit the</u> 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 <u>shall not exceed</u> 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<sub>2</sub> per day (Basis: (Cumulative Increase)
- 21. The owner/operator shall limit Ethe 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<sub>10</sub> per year (Basis: (PSD)
  - e. 8.01 tons of SO<sub>2</sub> per year (Basis: (Cumulative Increase)

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

- 22. \*The owner/operator shall ensure Mmaximum annual emissions from the Gas Turbine, HRSG, and three Auxiliary Boilers combined (S-201, S-202, -S-203, S-204, -and S-205) shall 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 <a href="affect effect">affect effect</a> 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](TRMP)

- 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.

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

- 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)

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

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: (TRMP)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: (TRMP)BAAOMD 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.

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

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]TRMP-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.

(Rasic: Offsets for POC, PSD for PM10, RAAOMD Regulation 2 Rule 5 [Toxics]TRMP, for

(<u>Basis:</u> Offsets for POC, PSD for PM10, <u>BAAQMD Regulation 2 Rule 5 [Toxics]TRMP</u> 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: (TRMP)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

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

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 from after the first occurrence of the violation.

(Basis: BAAQMD Regulation (1-522-7)

## VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

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

<u>This section is a summary of the limits and monitoring</u>, and that Iin the case of a conflict between Sections I-VI and Section VII, the preceding sections (I-VI) take precedence.

**Table VII-A S-201 - GAS TURBINE** 

Type of limit	Emission Limit CitationCi tation of Limit	FE Y/N	Future Effective Date	<del>Emission</del> Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	С	CEM
	NSPS, 40 CFR 60.332 (a)(1)	Y		42 ppmv, @ 15% O2, dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
	BAAQMD condition #14970, part 9a	Y		39.2 lb/hr , for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	С	CEM
	BAAQMD condition #14970, part 9b	Y		5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	С	CEM

Table VII-A S-201 - GAS TURBINE

Type of limit	Emission Limit CitationCi tation of Limit	FE Y/N	Future Effective Date	<del>Emission</del> -Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, part 20a	Y		969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	С	CEM
NOX	BAAQMD condition #14970, part 21a	Y		160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	С	CEM
СО	BAAQMD condition #14970, part 9c	Y		46.6 lb/hr, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	С	CEM
	BAAQMD condition #14970, Part 9d	Y		10 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 3-hr average	BAAQMD condition #14970, part 23	С	CEM
	BAAQMD condition #14970, Part 20b	Y		745.0 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	С	CEM
	BAAQMD condition #14970, part 21b	Y		73.27 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	С	CEM
SO2	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	

Table VII-A S-201 - GAS TURBINE

Type of limit	Emission Limit CitationCi tation of Limit	FE Y/N	Future Effective Date	Emission-Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring requirement subsumed by requirement for PUC	N	
					quality natural gas. See Permit Shield.		
	BAAQMD condition #14970, part 20e	Y		48.5 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 21e	Y		8.01 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
Opacity	BAAQMD 6-1-301	N		Ringelmann No. 1 for no more than 3 min/hr		N	
Filterable Particulate	BAAQMD 6-1-310	Y		0.15 grain/dscf @ 6% O2		N	
PM10	BAAQMD condition #14970, Part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 20d	Y		329.1 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A	Source test

Table VII-A S-201 - GAS TURBINE

Type of limit	Emission Limit CitationCi tation of Limit	FE Y/N	Future Effective Date	Emission-Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #14970, part 21d	Y		58.19 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
POC	BAAQMD condition #14970, part 20c	Y		352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/D	Calculations
	BAAQMD condition #14970, part 20c	Y		352.6 lb/day (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 27	P/A	Source test
	BAAQMD condition #14970, Part 21c	Y		48.45 ton/yr (as CH4) for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 24	P/A	Calculations
NH3	BAAQMD condition #14970, Part 9f	N		20 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 25	P/E	Calculations or source test
	BAAQMD condition #14970, Part 9f	N		20 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined	BAAQMD condition #14970, part 27	P/A	Source test
Formal- dehyde	BAAQMD condition #14970, part 22a	N		4318.6 lb/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 26	P/A	calculations

Table VII-A S-201 - GAS TURBINE

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

**Table VII-A S-201 - GAS TURBINE** 

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

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

Table VII-B S-202 – HEAT RECOVERY STEAM GENERATOR

	Citation of		Future		Monitoring	Monitoring	
Type of	<u>Limit</u> Emiss	FE	Effective		Requirement	Frequency	Monitoring
limit	<del>ion Limit</del>	Y/N	Date	Emission-Limit	Citation	(P/C/N)	Type
	Citation						

Table VII-B
S-202 – HEAT RECOVERY STEAM GENERATOR

Type of limit	Citation of LimitEmiss ion Limit Citation	FE Y/N	Future Effective Date	<del>Emission</del> -Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOX	BAAQMD9	N		125 ppm	BAAQMD	С	CEM
	-3-303 NSPS 40 CFR 60.44 <u>D</u> a (a)(1)	Y		0.2 lb/mmbtu except during startup, shutdown, or malfunction	1-520.1  Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.Exempt from monitoring	N	
	BAAQMD condition #14970,	Y		39.2 lb/hr for turbine and HRSG combined, 3-hr average	per 40 CFR 60.334(j)(1)(iii) BAAQMD condition #14970,	С	CEM
NOX	part 9a  BAAQMD condition #14970, Part 9b	Y		5.0 ppmv @ 15% 02, for turbine and HRSG combined, 3-hr average	part 23  BAAQMD condition #14970, part 23	С	CEM
	BAAQMD condition #14970, Part 20a	Y		969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	С	CEM
	BAAQMD condition #14970, Part 21a	Y		160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD condition #14970, part 23	С	CEM

Table VII-B
S-202 – HEAT RECOVERY STEAM GENERATOR

	Citation of		Future		Monitoring	Monitoring	
Type of	LimitEmiss	FE	Effective		Requirement	Frequency	Monitoring
limit	ion Limit	Y/N	Date	Emission-Limit	Citation	(P/C/N)	Туре
'	Citation						
CO	BAAQMD			46.6 lb/hr, for turbine	BAAQMD	С	CEM
	condition			and HRSG combined,	condition		
	#14970,			3-hr average	#14970,		
	Part 9c				part 23		
	BAAQMD			10 ppmv, @ 15% O2,	BAAQMD	С	CEM
	condition			dry, for turbine and	condition		
	#14970,			HRSG combined, 3-hr	#14970,		
	Part 9d			average	part 23		
	BAAQMD	Y		745.0 lb/day for	BAAQMD	С	CEM
	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	Part 20b				part 23		
	BAAQMD	Y		73.27 ton/yr for	BAAQMD	C	CEM
	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	part 21b				part 23		
SO2	BAAQMD	Y		GLC <sup>1</sup> of 0.5 ppm for 3		N	
	9-1-301			min or 0.25 ppm for			
				60 min or 0.05 ppm			
				for 24 hours			
SO2	BAAQMD	Y		300 ppm (dry)		N	
	9-1-302						
	NSPS			0.2 lb/mmbtu, 24 hr		N	
	40 CFR			average except during			
	60.43 <u>D</u> a			startup, shutdown			
	(b)(2)						
	BAAQMD	Y		48.5 lb/day for	BAAQMD	P/D	Calculations
	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	part 20e				part 24		

Table VII-B
S-202 – HEAT RECOVERY STEAM GENERATOR

	Citation of		Future		Monitoring	Monitoring	
Type of	LimitEmiss	FE	Effective		Requirement	Frequency	Monitoring
limit	ion Limit	Y/N	Date	Emission-Limit	Citation	(P/C/N)	Туре
	Citation					, , ,	• • •
	BAAQMD	Y		8.01 ton/yr for turbine,	BAAQMD	P/A	Calculations
	condition			HRSG, and boilers	condition		
	#14970,			combined	#14970,		
	part 21e				part 24		
TSPOpacit	BAAQMD	N		Ringelmann No. 1 <u>"for</u>		N	
<u>y</u>	6- <u>1-</u> 301			< 3 min/hr."			
	BAAQMD	Y		During tube cleaning,		N	
	6- <u>1-</u> 304			Ringelmann No. 2 for			
				3 min/hr and 6			
				min/billion btu/24			
				hours			
	NSPS	Y		< 20% opacity, 6		N	
	40 CFR			minute average,			
	60.42 <u>D</u> a(b)			except one six minute			
				period/hr up to 27%			
				opacity			
<u>Filterable</u>	BAAQMD	Y		0.15 grain/dscf		N	
<u>Particulate</u>	6- <u>1-</u> 310			@ 6% O2			
	NSPS	Y		0.03 lb <del>TSP</del> /mmbtu		N	
	40 CFR			except during startup,			
	60.42 <u>D</u> a(a)			shutdown, or			
	(1)			malfunction			
PM10	BAAQMD	Y		329.1 lb/day for	BAAQMD	P/D	Calculations
	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	part 20d				part 24		
	BAAQMD	Y		329.1 lb/day for	BAAQMD	P/A	Source test
	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	Part 20d				part 27		

Table VII-B
S-202 – HEAT RECOVERY STEAM GENERATOR

	Citation of		Future		Monitoring	Monitoring	
Type of	<u>Limit</u> Emiss	FE	Effective		Requirement	Frequency	Monitoring
limit	ion Limit	Y/N	Date	Emission-Limit	Citation	(P/C/N)	Туре
	Citation						
	BAAQMD	Y		58.19 ton/yr for	BAAQMD	P/A	Calculations
	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	Part 21d				part 24		
POC	BAAQMD	Y		352.6 lb/day (as CH4)	BAAQMD	P/D	Calculations
	condition			for turbine, HRSG,	condition		
	#14970,			and boilers combined	#14970,		
	Part 20c				part 24		
	BAAQMD	Y		352.6 lb/day (as CH4)	BAAQMD	P/A	Source test
	condition			for turbine, HRSG,	condition		
	#14970,			and boilers combined	#14970,		
	Part 20c				part 27		
	BAAQMD	Y		48.45 ton/yr (as CH4)	BAAQMD	P/A	Calculations
	condition			for turbine, HRSG,	condition		
	#14970,			and boilers combined	#14970,		
	Part 21c				part 24		
NH3	BAAQMD	N		20 ppmv, @ 15% O2,	BAAQMD	P/E	Calculations or
	condition			dry, averaged over 3	condition		source test
	#14970,			hrs for turbine and	#14970,		
	part 9f			HRSG combined	part 25		
	BAAQMD	N		20 ppmv, @ 15% O2,	BAAQMD	P/A	Source test
	condition			dry, averaged over 3	condition		
	#14970,			hrs for turbine and	#14970,		
	part 9f			HRSG combined	part 27		
Formal-	BAAQMD	N		4318.6 lb/yr for	BAAQMD	P/A	calculations
dehyde	condition			turbine, HRSG, and	condition		
	#14970,			boilers combined	#14970,		
	Part 22a				part 26		

Table VII-B
S-202 – HEAT RECOVERY STEAM GENERATOR

	Citation of		Future		Monitoring	Monitoring	
Type of	<u>Limit</u> Emiss	FE	Effective		Requirement	Frequency	Monitoring
limit	ion Limit	Y/N	Date	Emission-Limit	Citation	(P/C/N)	Type
	Citation						
	BAAQMD	N		4318.6 lb/yr for	BAAQMD	P/every 2	Source Test
	condition			turbine, HRSG, and	condition	years	
	#14970,			boilers combined	#14970,		
	part 22a				part 29		
Benzene	BAAQMD	N		116.1 lb/yr for turbine,	BAAQMD	P/A	calculations
	condition			HRSG, and boilers	condition		
	#14970,			combined	#14970,		
	Part 22b				part 26		
	BAAQMD	N		116.1 lb/yr for turbine,	BAAQMD	P/every 2	Source Test
	condition			HRSG, and boilers	condition	years	
	#14970,			combined	#14970		
	part 22b				part 29		
Specified	BAAQMD	N		78.7 lb/yr for turbine,	BAAQMD	P/A	calculations
PAH's	condition			HRSG, and boilers	condition		
	#14970,			combined	#14970,		
	part 22c				part 26		
	BAAQMD	N		78.7 lb/yr for turbine,	BAAQMD	P/every 2	Source Test
	condition			HRSG, and boilers	condition	years	
	#14970,			combined	#14970,		
	Part 22c				part 29		
Heat input	BAAQMD	Y		349-288.9 mmbtu/hr,	BAAQMD	С	fuel meter,
limit	condition			3-hr average	condition		calculations
	#14970,				#14970,		
	part 3				part 23		
	BAAQMD	Y		2,129 mmbtu/hr for	BAAQMD	С	fuel meter,
	condition			turbine and HRSG	condition		calculations
	#14970,			combined, 3-hr	#14970,		
	part 4			average	part 23		

Table VII-B
S-202 – HEAT RECOVERY STEAM GENERATOR

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

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

Table VII-C S203, S204, S205– AUXILIARY STEAM BOILERS

Type of limit	Citation of LimitEmis sion Limit	FE Y/	Future Effective Date	<del>Emission</del> -Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	Citation	N					
NOX	BAAQMD 9-3-303	N		125 ppm	BAAQMD 1-520.1	С	CEM
	BAAQMD 9-7-301.1	Y		30 ppmv @3%O2, dry	BAAQMD 1-520.1	С	CEM
	BAAQMD cond# 14970, part 17a	Y		3.7 lb/hr, 3-hr average for each boiler	BAAQMD cond# 14970, part 23	С	СЕМ
	BAAQMD cond# 14970, part 17b	Y		8.2 ppmv @ 3% O2, dry, 3-hr average	BAAQMD cond# 14970, part 23	С	СЕМ
	BAAQMD cond# 14970, part 20a	Y		969.7 lb/day for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	С	СЕМ
	BAAQMD cond# 14970, part 21a	Y		160.85 ton/yr for turbine, HRSG, and boilers combined	BAAQMD cond# 14970, part 23	С	СЕМ
	NSPS 40 CFR 60.44b (a)(1)(i)	Y		0.1 lb/mmbtu	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
СО	BAAQMD 9-7-301.2	Y		400 ppmv @ 3% O2, dry	BAAQMD cond# 14970, part 23	С	СЕМ

Table VII-C S203, S204, S205– AUXILIARY STEAM BOILERS

	Citation of		Future		Monitoring	Monitoring	
Type of	<u>Limit</u> Emis	FE	Effective		Requirement	Frequency	Monitoring
limit	sion Limit	<b>Y</b> /	Date	Emission-Limit	Citation	(P/C/N)	Type
	Citation	N					
CO	BAAQMD	Y		3.0 lb/hr, 3-hr average	BAAQMD	С	CEM
	cond#			for each boiler	cond# 14970,		
	14970,				part 23		
	part 17c						
	BAAQMD	Y		11.0 ppmv @ 3% O2,	BAAQMD	С	CEM
	cond#			dry, 3-hr average	cond# 14970,		
	14970,				part 23		
	part 17d						
	BAAQMD	Y		745.0 lb/day for	BAAQMD	C	CEM
	cond#			turbine, HRSG, and	cond# 14970,		
	14970,			boilers combined	part 23		
	part 20b						
	BAAQMD	Y		73.27 ton/yr for	BAAQMD	C	CEM
	cond#			turbine, HRSG, and	cond# 14970,		
	14970,			boilers combined	part 23		
	part 21b						
SO2	BAAQMD	Y		GLC <sup>1</sup> of 0.5 ppm for 3		N	
	9-1-301			min or 0.25 ppm for			
				60 min or 0.05 ppm			
				for 24 hours			
	BAAQMD	Y		300 ppm (dry)		N	
	9-1-302						
SO2	BAAQMD	Y		48.5 lb/day for	BAAQMD	P/D	Calculations
	cond#			turbine, HRSG, and	cond# 14970,		
	14970,			boilers combined	part 24		
	part 20e						
SO2	BAAQMD	Y		8.01 ton/yr for turbine,	BAAQMD	P/A	Calculations
	cond#			HRSG, and boilers	cond# 14970,		
	14970,			combined	part 24		
	part 21e						

Table VII-C S203, S204, S205– AUXILIARY STEAM BOILERS

	Citation of		Future		Monitoring	Monitoring	
Type of	<u>Limit</u> Emis	FE	Effective		Requirement	Frequency	Monitoring
limit	sion Limit	<b>Y</b> /	Date	Emission-Limit	Citation	(P/C/N)	Type
	Citation	N					
TSPOpacit	BAAQMD	N		Ringelmann No. 1 for		N	
<u>y</u>	6-301			no more than 3 min/hr			
<del>TSP</del>	BAAQMD	Y		During tube cleaning,		N	
	6-304			Ringelmann No. 2 for			
				3 min/hr and 6			
				min/billion btu/24			
				hours			
<u>Filterable</u>	BAAQMD	Y		0.15 grain/dscf		N	
<u>Particulate</u>	6- <u>1-</u> 310			@ 6% O2			
	NSPS 40	¥		<0.10 lb/mmbtu		N	
	CFR						
	60.42(a)(1)						
	NSPS 40	¥		< 20% opacity except		N	
	CFR			for one 6 min			
	60.42(a)(2)			<del>period/hr @ &lt; 27%</del>			
				<del>opacity</del>			
PM10	BAAQMD	Y		329.1 lb/day for	BAAQMD	P/D	Calculations
	cond#			turbine, HRSG, and	cond# 14970,		
	14970,			boilers combined	part 24		
	part 20d						
	BAAQMD	Y		329.1 lb/day for	BAAQMD	P/1-2 times	Source Test
	cond#			turbine, HRSG, and	cond# 14970,	per 5 years	
	14970,			boilers combined	part 28		
	part 20d						
PM10	BAAQMD	Y		58.19 ton/yr for	BAAQMD	P/A	Calculations
	cond#			turbine, HRSG, and	cond# 14970,		
	14970,			boilers combined	part 24		
	part 21d						

Table VII-C S203, S204, S205– AUXILIARY STEAM BOILERS

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

Table VII-C S203, S204, S205– AUXILIARY STEAM BOILERS

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

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

### VIII. TEST METHODS

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

**Table VIII** 

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
6- <u>1-</u> 301		
BAAQMD	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible Emissions
6- <u>1-</u> 304		
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
6- <u>1-</u> 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,
9-7-301.2	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

## VIII. Test Methods (continued)

## Table VIII (continued)

Applicable		
Requirement	<b>Description of Requirement</b>	Acceptable Test Methods
NSPS		
Subpart D	Standards of Performance for	
	Fossil-Fuel-Fired Steam	
	Generators for Which	
	Construction Is Commenced	
	after August 17, 1971	
60.42(a)(1)	Particulate limit	EPA Method 5, Determination of Particulate Emissions from
		Stationary Sources
60.42(a)(2)	Opacity Limit	EPA Method 9, Visual Determination of the Opacity of Emissions
		from Stationary Sources
Subpart Da	Standards of Performance for	
	Electric Utility Steam Generating	
	Units for Which Construction Is	
	Commenced after September 18,	
	1978	
60.42 <u>D</u> a	Particulate Limit	EPA Method 5, Determination of Particulate Emissions from
(a)(1)		Stationary Sources
60.42 <u>D</u> a (b)	Opacity Limit	EPA Method 9, Visual Determination of the Opacity of Emissions
		from Stationary Sources
60.43 <u>D</u> a	SO2 limit	EPA Method 19, Determination of Sulfur Dioxide Removal
(b)(2)		Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen
		Oxides Emission Rates
60.44 <u>D</u> a	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) <del>(4)(i)</del> (1)(i)		
Subpart GG	Standards of Performance for	
	Stationary Gas Turbines	
60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur
		Dioxide, and Diluent Emissions from Stationary Gas Turbines

## **VIII. Test Methods (continued)**

## **Table VIII (continued)**

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
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
BAAQMD		
Cond# 14970		
part 2	Hourly heat input limit for	None
	turbine	
part 3	Hourly heat input limit for	None
	HRSG	
part 4	Hourly heat input limit for	None
	turbine and HRSG	
part 5	Daily heat input limit for turbine	None
	and HRSG	
part 6	Annual heat input limit for	None
	turbine and HRSG	
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	

## VIII. Test Methods (continued)

## Table VIII (continued)

Applicable		
Requirement	Description of Requirement	Acceptable Test Methods
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	
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)	

### IX. PERMIT SHIELD

### A. NON-APPLICABLE REQUIREMENTS

None.

### **B. SUBSUMED REQUIREMENTS**

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

Table IX-A S-201, Gas Turbine

Subsumed			
Requirement		Streamlined	
Citation	Title or Description	Requirements	Title or Description
40-CFR	Fuel Sulfur and Nitrogen Content	BAAQMD	Requirement for use of PUC quality
60.334(b)(2)	monitoring (natural gas)	Condition	natural gas
		14970, part 1	
40 CFR	Periods of excess emissions, NOx	BAAQMD	Requirement for continuous emission
60.334(c)(1)		Condition	monitor for NOx
		<del>14970,</del>	
		<del>part 23b</del>	

## IX. Permit Shield (continued)

Table IX-B S202, HEAT RECOVERY STEAM GENERATOR

Subsumed Requirement Citation	Title on Decemention	Streamlined  Degringments	Title on Description
Citation	Title or Description	Requirements	Title or Description
40 CFR	Continuous Monitoring of	BAAQMD	Requirement for continuous emission
60.47a(c)	Nitrogen Oxides	Condition	monitor for NOx
		# <del>14970,</del>	
		<del>part 23b</del>	

Table IX<del>-C</del> 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	

### 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

#### **CEOA**

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.

### $\mathbf{CO}$

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

#### **NO**x

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.

#### TRMP

Toxic Risk Management Plan

#### **TBACT**

Toxic-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	

## APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN

<u>The Bay Area Air Quality Management District's portion of the State Implementation Plan can be found at EPA Region 9's website.</u> The address is:

http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Ba

See Attachments