

# Bay Area Air Quality Management District

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

---

---

## Proposed

# MAJOR FACILITY REVIEW PERMIT

Issued To:

**Delta Energy Center, LLC**  
**Facility #B2095**

**Facility Address:**

901 Loveridge Road  
Pittsburg, CA 94565

**Mailing Address:**

PO Box 551  
Pittsburg, CA 94565

**Responsible Official**

William Ferguson  
925-252-2075

**Facility Contact**

David Zeiger, Compliance Manager  
925-252-2066

---

---

**Type of Facility:** Power Plant  
**Primary SIC:** 4913  
**Product:** Generation of Electricity

**BAAQMD Permit Division Contact:**  
Dennis Jang

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

---

William C. Norton, Executive Officer/APCO

---

Date

**TABLE OF CONTENTS**

I. STANDARD CONDITIONS..... 3

II. EQUIPMENT..... 8

III.GENERALLY APPLICABLE REQUIREMENTS..... 10

IV.SOURCE-SPECIFIC APPLICABLE REQUIREMENTS ..... 12

V. SCHEDULE OF COMPLIANCE..... 43

VI.PERMIT CONDITIONS ..... 43

VII.APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS ..... 59

VIII.TEST METHODS ..... 117

IX.TITLE IV ACID RAIN PERMIT ..... 120

X. PERMIT SHIELD..... 124

XI.GLOSSARY ..... 125

XII.APPLICABLE STATE IMPLEMENTATION PLAN ..... 129

XIII.TITLE IV APPLICATION ..... 130

## I. STANDARD CONDITIONS

### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

- BAAQMD Regulation 1 - General Provisions and Definitions  
(as amended by the District Board on 5/2/01);
- SIP Regulation 1 - General Provisions and Definitions  
(as approved by EPA through 8/27/99);
- BAAQMD Regulation 2, Rule 1 - Permits, General Requirements  
(as amended by the District Board on 8/1/01);
- SIP Regulation 2, Rule 1 - Permits, General Requirements  
(as approved by EPA through 2/25/99);
- BAAQMD Regulation 2, Rule 2 - Permits, New Source Review  
(as amended by the District Board on 5/17/00);
- SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration  
(as approved by EPA through 2/25/99);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking  
(as amended by the District Board on 5/17/00);
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking  
(as approved by EPA through 2/25/99); and
- BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review  
(as amended by the District Board on 5/2/01).

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

1. This Major Facility Review Permit was issued on [ ], and expires on [ ]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than [ ] and no earlier than [ ]. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after [ ].** (Regulation 2-6-307, 404.2, & 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; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; 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 permit holder 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. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)

## **I. Standard Conditions**

5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, or any exclusive privilege. (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. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records that must be maintained pursuant to this permit that the permittee considers proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (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. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit 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. (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.

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

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

## **I. Standard Conditions**

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

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment that is subject to this permit to the APCO and/or to his or her designee. (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. (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. (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 September 6, 2001, to February 28, 2002. The report shall be submitted by March 31, 2002. Subsequent reports shall be for the following periods: March 1st through August 31st and September 1st through February 28th or 29th, 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 responsible official shall certify that the reports are 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

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

## **I. Standard Conditions**

### **G. Compliance Certification**

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be September 1st to August 31st. The certification shall be submitted by September 30th 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 shall 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

(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. (MOP Volume II, Part 3, §4.8)
2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)
3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (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. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

### **J. Miscellaneous Conditions**

## **I. Standard 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. (Regulation 2-1-301)

## **K. Accidental Release**

This facility is subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. The permit holder shall submit a risk management plan (RMP) by the date specified in §68.10. The permit holder shall also certify compliance with the requirements of Part 68 as part of the annual compliance certification, as required by Regulation 2, Rule 6. (40 CFR Part 68, Regulation 2, Rule 6)

## **L. Conditions to Implement Regulation 2, Rule 7, Acid Rain**

1. Every year starting January 30, 2000, the permit holder shall hold one sulfur dioxide allowance on January 30 for each ton of sulfur dioxide emitted during the preceding year from January 1 through December 31. (MOP Volume II, Part 3, §4.9)
2. The equipment installed for the continuous monitoring of CO<sub>2</sub> and NO<sub>x</sub> shall be maintained and operated in accordance with 40 CFR Parts 72 and 75. (Regulation 2-7, Acid Rain)
3. A written Quality Assurance program must be established in accordance with 40 CFR Part 75, Appendix B for NO<sub>x</sub> which includes, but is not limited to: procedures for daily calibration testing, quarterly linearity testing, record keeping and reporting implementation, and relative accuracy testing. (Regulation 2-7, Acid Rain)
4. The permit holder shall monitor SO<sub>2</sub> emissions in accordance with 40 CFR Part 72 and 75. (Regulation 2-7, Acid Rain)
5. The permit holder shall submit quarterly Electronic Data Reports (EDRs) to EPA for S-1, S-3, and S-5, Turbines, and S-2, S-4, and S-6, Heat Recovery Steam Generators. These reports must be submitted within 30 days following the end of each calendar quarter and shall include all information required in § 75.64. (40 CFR Part 75)

## II. EQUIPMENT

**Table II A – Permitted Sources**

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.

S-#	Description	Make or Type	Model	Capacity
1	Turbine #1 (natural gas)	Westinghouse	501FD2	200 MW 2,005 MM BTU/hr
2	Heat Recovery Steam Generator #1 (natural gas)			200 MM BTU/hr
3	Turbine #2 (natural gas)	Westinghouse	501FD2	200 MW 2,005 MM BTU/hr
4	Heat Recovery Steam Generator #2 (natural gas)			200 MM BTU/hr
5	Turbine #3 (natural gas)	Westinghouse	501FD2	200 MW 2,005 MM BTU/hr
6	Heat Recovery Steam Generator #3 (natural gas)			200 MM BTU/hr
9	Cooling Tower	Custom-made		14-cell 10,100,000 gal/hr
10	Fire Pump Diesel Engine	Detroit Diesel	8064-7412	368 bhp



## II. Equipment

**Table II B – Abatement Devices**

<b>A-#</b>	<b>Description</b>	<b>Source(s) Controlled</b>	<b>Applicable Requirement</b>	<b>Operating Parameters</b>	<b>Limit or Efficiency</b>
1	Selective Catalytic Reduction System	S-1, S-2	BAAQMD Condition #17154, part 22(b)	None	2.5 ppmv NOx @ 15% O <sub>2</sub> , dry, 1-hr average
2	Selective Catalytic Reduction System	S-3, S-4	BAAQMD Condition #17154, part 22(b)	None	2.5 ppmv NOx @ 15% O <sub>2</sub> , dry, 1-hr average
3	Selective Catalytic Reduction System	S-5, S-6	BAAQMD Condition #17154, part 22(b)	None	2.5 ppmv NOx @ 15% O <sub>2</sub> , dry, 1-hr average

### III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. 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.

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

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

The full language of SIP requirements is on EPA Region 9’s website. The address is included at the end of this permit.

**NOTE:**

There are differences between the current BAAQMD rules and the versions of the rules in the SIP. All sources must comply with both versions of the rule until US EPA has reviewed and approved the District’s revision of the regulation.

**Table III  
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/01)	N
SIP Regulation 1	General Provisions and Definitions (8/27/99)	Y
BAAQMD Regulation 2, Rule 1	General Requirements (5/2/01)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/95)	Y
SIP Regulation 2, Rule 1	General Requirements (8/27/99)	Y

### III. Generally Applicable Requirements

**Table III  
 Generally Applicable Requirements**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (3/6/02)	N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (12/20/95)	N
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (12/4/91)	Y
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	Y
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	Y
California Health and Safety Code Section 44300 et seq.	Air Toxics "Hot Spots" Information and Assessment Act of 1987	N
BAAQMD Condition 18310, Part 60	Implementation of BAAQMD Regulation 4, Air Pollution Episode Plan	Y

#### IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

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

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

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

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. The full language of SIP requirements is on EPA Region 9's website. The address is included at the end of this permit. All other text may be found in the regulations themselves.

**Table IV – A**  
**Source-specific Applicable Requirements**  
**S-1, GAS TURBINE #1**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (5/2/01)</b>		
1-107	Combination of Emissions	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of inoperation	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – A  
 Source-specific Applicable Requirements  
 S-1, GAS TURBINE #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)</b>		
2-1-501	Monitors	Y	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 9</b>	<b>Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (9/21/94)</b>		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-301	Emission Limits, General	Y	
9-9-301.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – A  
 Source-specific Applicable Requirements  
 S-1, GAS TURBINE #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
9-9-501	Monitoring and recordkeeping requirements	Y	
<b>BAAQMD Manual of Procedures, Volume V</b>	<b>Continuous Emission Monitoring Policy and Procedures (1/20/82)</b>	Y	
<b>40 CFR 60 Subpart A</b>	<b>Standards of Performance for New Stationary Sources (12/23/71)</b>	Y	
	<b>General Provisions</b>	Y	
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	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/14/79)</b>	Y	
60.42a(a)(1)	Particulate Limit	Y	
60.42a(b)	Opacity Limit	Y	
60.43a(b)(2)	SO2 limit	Y	
60.44a(a)(1)	NOx concentration limit	Y	
60.44a(a)(2)	NOx reduction requirement	Y	
60.44a(d)(1)	NOx limit-lbs/MW-hr	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (1/27/82)</b>		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
60.334(b)(2)	Sulfur and nitrogen content of fuel	Y	
60.335	Test Methods and Procedures	Y	
<b>40 CFR Part 72</b>	<b>Title IV – Acid Rain Program</b>	Y	
<b>40 CFR Part 75</b>	<b>Code of Federal Regulations, Continuous Emissions Monitoring</b>	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – A  
 Source-specific Applicable Requirements  
 S-1, GAS TURBINE #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Condition #17154</b>			
Definitions	Definitions	Y	
part 1	Minimization of emissions during commissioning period (PSD for NOx and CO)	Y	
part 2	Tuning to minimize emissions (PSD for NOx and CO)	Y	
part 3	Installation of SCR System as early as possible (PSD for NOx)	Y	
part 4	Compliance with NOx and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (PSD for NOx and CO)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NOx, CO, and oxygen concentrations (9-9-501, BACT, offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, offsets)	Y	
part 8	Limit on uncontrolled operation during commissioning (offsets)	Y	
part 11	Mass emission rates during commissioning included in annual limits (offsets)	Y	
part 12	Mass emission rates during commissioning (PSD for NOx and CO)	Y	
part 13	Startup/shutdown source test (PSD for NOx and CO, offsets)	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur content of 0.25 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 19	SCR System requirement (BACT for NO <sub>x</sub> and CO)	Y	
part 22	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 22a	Hourly and heat-input rate NOx limits (PSD for NOx)	Y	
part 22b	NOx concentration limit (BACT for NO <sub>x</sub> )	Y	
part 22c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 22d	CO concentration limit (BACT for CO)	Y	
part 22e	Ammonia concentration limit and monitoring (TRMP for NH <sub>3</sub> )	N	
part 22f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 22g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 22h	Hourly and heat-input rate PM <sub>10</sub> limits (BACT for PM <sub>10</sub> )	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – A**  
**Source-specific Applicable Requirements**  
**S-1, GAS TURBINE #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 23	Limits during startup or shutdown (PSD)	Y	
part 24	Turbines may not be in startup mode simultaneously (PSD)	Y	
part 36	Daily Combined Emission Limits for Gas Turbines and HRSGs (CEQA, PSD, BACT)	Y	
part 37	Annual Combined Emission Limits for Gas Turbines and HRSGs (Offsets, cumulative increase, PSD)	Y	
part 38	Annual emission limits for toxic air contaminants for Gas Turbines and HRSGs (TRMP)	Y	
part 39	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 40	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 41	Calculation of emissions and recordkeeping for toxic air contaminants (TRMP)	N	
part 42	Ammonia slip source test (TRMP)	N	
part 43	Source test to determine compliance with parts 22a, b, c, d and f (BACT, offsets)	Y	
part 44	District review of source test procedures (BACT)	Y	
part 45	Initial and biennial source tests for toxic air contaminants (TRMP)	N	
part 46	Submittal of reports (2-6-502)	Y	
part 47	Retention of records for five years (2-6-502)	Y	
part 48	Notification of violations to District (2-1-403)	Y	
part 49	Stack heights (PSD, TRMP)	Y	
part 50	Sampling ports and platforms (1-501)	Y	
part 51	Review of continuous monitors, sampling ports, platforms, and source tests (1-501)	Y	
part 54	Submittal of Title V application (2-6-404.1)	Y	
part 55	Submittal of Title IV application (40 CFR 72.30(b)(2))	Y	

**Table IV – B**  
**Source-specific Applicable Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**



#### IV. Source-Specific Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (5/2/01)</b>		
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NOx, CO <sub>2</sub> , or O <sub>2</sub>	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	N	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of inoperation	Y	
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)</b>		
2-1-501	Monitors	Y	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		

#### IV. Source-Specific Applicable Requirements

**Table IV – B**  
**Source-specific Applicable Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
6-301	Ringelmann Number 1 Limitation	Y	
6-304	Tube Cleaning	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 3</b>	<b>Inorganic Gaseous Pollutants – Nitrogen Oxides from Heat Transfer Operations (3/17/82)</b>		
9-3-303	Nitrogen oxide emission limitation	Y	
<b>BAAQMD Manual of Procedures, Volume V</b>	<b>Continuous Emission Monitoring Policy and Procedures (1/20/82)</b>		
<b>40 CFR 60</b>	<b>Standards of Performance for New Stationary Sources (12/23/71)</b>	Y	
<b>Subpart A</b>	<b>General Provisions</b>	Y	
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	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/14/79)</b>	Y	
60.42a(a)(1)	Particulate Limit	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – B  
 Source-specific Applicable Requirements  
 S-2, HEAT RECOVERY STEAM GENERATOR #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.42a(b)	Opacity Limit	Y	
60.43a(b)(2)	SO2 limit	Y	
60.43a(g)	Averaging (24-hour for Bay Area)	Y	
60.44a(a)(1)	NOx concentration limit	Y	
60.44a(a)(2)	NOx reduction requirement	Y	
60.44a(d)(1)	NOx limit-lbs/MW-hr	Y	
60.46a(a)	Compliance, particulate limitation	Y	
60.46a(b)	Compliance, NOX limitation	Y	
60.46a(c)	Applicability of Limits	Y	
60.47a(f)	Availability of information	Y	
<u>60.47a(o)</u>	<u>Exemption from NOx monitoring for duct burners</u>	<u>Y</u>	
60.48a	Compliance determination procedures and methods	Y	
60.49a(a)	Performance test reports	Y	
60.49a(b)	NOX emission reports	Y	
60.49a(c)	Reports regarding lack of minimum data	Y	
60.49a(d)	Exceedances during emergency conditions	Y	
60.49a(f)	Reports regarding data availability	Y	
60.49a(g)	Signed statements	Y	
60.49a(h)	Opacity exceedance definition	Y	
60.49a(i)	Reports to Administrator (Also required to District)	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (1/27/82)</b>		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
<b>40 CFR Part 72</b>	<b>Title IV – Acid Rain Program</b>	Y	
<b>40 CFR Part 75</b>	<b>Code of Federal Regulations, Continuous Emissions Monitoring</b>	Y	
<b>BAAQMD Condition #17154</b>			
Definitions	Definitions	Y	
part 1	Minimization of emissions during commissioning period (PSD for NOx and CO)	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – B  
 Source-specific Applicable Requirements  
 S-2, HEAT RECOVERY STEAM GENERATOR #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 2	Tuning to minimize emissions (PSD for NO <sub>x</sub> and CO)	Y	
part 3	Installation of SCR system as early as possible (PSD for NO <sub>x</sub> )	Y	
part 4	Compliance with NO <sub>x</sub> and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (PSD for NO <sub>x</sub> and CO)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NO <sub>x</sub> , CO, and oxygen concentrations (9-9-501, BACT, offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, offsets)	Y	
part 8	Limit on uncontrolled operation during commissioning (offsets)	Y	
part 11	Mass emission rates during commissioning included in annual limits (offsets)	Y	
part 12	Mass emission rates during commissioning (PSD for NO <sub>x</sub> and CO)	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur content of 0.25 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 18	Duct burners shall not be fired unless turbines are in operation (BACT for NO <sub>x</sub> , CO, POC)	Y	
part 19	SCR system requirement (BACT for NO <sub>x</sub> )	Y	
part 22	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 22a	Hourly and heat input rate NO <sub>x</sub> limits (PSD for NO <sub>x</sub> )	Y	
part 22b	NO <sub>x</sub> concentration limit (BACT for NO <sub>x</sub> )	Y	
part 22c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 22d	CO concentration limit (BACT for CO)	Y	
part 22e	Ammonia concentration limit and monitoring (TRMP for NH <sub>3</sub> )	N	
part 22f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 22g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 22h	Hourly and heat-input rate PM <sub>10</sub> limits (BACT for PM <sub>10</sub> )	Y	
part 23	Limits during startup or shutdown (PSD)	Y	
part 25	HRSR designed to accept oxidation catalyst (BACT for CO)	Y	
part 36	Daily Combined Emission Limits for Gas Turbines and HRSGs (CEQA, PSD, BACT)	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – B**  
**Source-specific Applicable Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 37	Annual Combined Emission Limits for Gas Turbines and HRSGs (Offsets, cumulative increase, PSD)	Y	
part 38	Facility annual emission limits for toxic air contaminants (TRMP)	N	
part 39	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 40	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 41	Calculation of emissions and recordkeeping for toxic air contaminants (TRMP)	N	
part 42	Ammonia slip source test (TRMP)	N	
part 43	Source test to determine compliance with parts 22a, b, c, d and f (BACT, offsets)	Y	
part 44	District review of source test procedures (BACT)	Y	
part 45	Initial and biennial source tests for toxic air contaminants (TRMP)	N	
part 46	Submittal of reports (2-6-502)	Y	
part 47	Retention of records for five years (2-6-502)	Y	
part 48	Notification of violations to District (2-1-403)	Y	
part 49	Stack heights (PSD, TRMP)	Y	
part 50	Sampling ports and platforms (1-501)	Y	
part 51	Review of continuous monitors, sampling ports, platforms, and source tests (1-501)	Y	
part 54	Submittal of Title V application (2-6-404.1)	Y	
part 55	Submittal of Title IV application (40 CFR 72.30(b)(2))	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – C  
 Source-specific Applicable Requirements  
 S-3, GAS TURBINE #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (11/3/93)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of inoperation	Y	
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)</b>		
2-1-501	Monitors	Y	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – C**  
**Source-specific Applicable Requirements**  
**S-3, GAS TURBINE #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 9</b>	<b>Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (9/21/94)</b>		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-301	Emission Limits, General	Y	
9-9-301.3	Emission Limits- Turbines Rated $\geq$ 10 MW w/SCR	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
<b>BAAQMD Manual of Procedures, Volume V</b>	<b>Continuous Emission Monitoring Policy and Procedures (1/20/82)</b>	Y	
<b>40 CFR 60 Subpart A</b>	<b>Standards of Performance for New Stationary Sources (12/23/71)</b>	Y	
	<b>General Provisions</b>	Y	
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	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/14/79)</b>	Y	
60.42a(a)(1)	Particulate Limit	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – C  
 Source-specific Applicable Requirements  
 S-3, GAS TURBINE #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.42a(b)	Opacity Limit	Y	
60.43a(b)(2)	SO2 limit	Y	
60.44a(a)(1)	NOX concentration limit	Y	
60.44a(a)(2)	NOx reduction requirement	Y	
60.44a(d)(1)	NOX limit-lbs/MW-hr	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (1/27/82)</b>		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
60.334(b)(2)	Sulfur and nitrogen content of fuel	Y	
60.335	Test Methods and Procedures	Y	
<b>40 CFR Part 72</b>	<b>Title IV – Acid Rain Program</b>	Y	
<b>40 CFR Part 75</b>	<b>Code of Federal Regulations, Continuous Emissions Monitoring</b>	Y	
<b>BAAQMD Condition #17154</b>			
Definitions	Definitions	Y	
part 1	Minimization of emissions during commissioning period (PSD for NOx and CO)	Y	
part 2	Tuning to minimize emissions (PSD for NOx and CO)	Y	
part 3	Installation of SCR System as early as possible (PSD for NOx)	Y	
part 4	Compliance with NOx and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (PSD for NOx and CO)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NOx, CO, and oxygen concentrations (9-9-501, BACT, offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, offsets)	Y	
part 9	Limit on uncontrolled operation during commissioning (offsets)	Y	
part 10	Mass emission rates during commissioning included in annual limits (offsets)	Y	
part 12	Mass emission rates during commissioning (PSD for NOx and CO)	Y	
part 13	Startup/shutdown source test (PSD for NOx and CO, offsets)	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur content of 0.25 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	



**IV. Source-Specific Applicable Requirements**

**Table IV – C  
 Source-specific Applicable Requirements  
 S-3, GAS TURBINE #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 20	SCR System requirement (BACT for NO <sub>x</sub> and CO)	Y	
part 22	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 22a	Hourly and heat-input rate NO <sub>x</sub> limits (PSD for NO <sub>x</sub> )	Y	
part 22b	NO <sub>x</sub> concentration limit (BACT for NO <sub>x</sub> )	Y	
part 22c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 22d	CO concentration limit (BACT for CO)	Y	
part 22e	Ammonia concentration limit and monitoring (TRMP for NH <sub>3</sub> )	N	
part 22f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 22g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 22h	Hourly and heat-input rate PM <sub>10</sub> limits (BACT for PM <sub>10</sub> )	Y	
part 23	Limits during startup or shutdown (PSD)	Y	
part 24	Turbines may not be in startup mode simultaneously (PSD)	Y	
part 36	Daily Combined Emission Limits for Gas Turbines and HRSGs (CEQA, PSD, BACT)	Y	
part 37	Annual Combined Emission Limits for Gas Turbines and HRSGs (Offsets, cumulative increase, PSD)	Y	
part 38	Annual emission limits for toxic air contaminants for Gas Turbines and HRSGs (TRMP)	N	
part 39	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 40	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 41	Calculation of emissions and recordkeeping for toxic air contaminants (TRMP)	N	
part 42	Ammonia slip source test (TRMP)	N	
part 43	Source test to determine compliance with parts 22a, b, c, d and f (BACT, offsets)	Y	
part 44	District review of source test procedures (BACT)	Y	
part 45	Initial and biennial source tests for toxic air contaminants (TRMP)	N	
part 46	Submittal of reports (2-6-502)	Y	
part 47	Retention of records for five years (2-6-502)	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – C  
 Source-specific Applicable Requirements  
 S-3, GAS TURBINE #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 48	Notification of violations to District (2-1-403)	Y	
part 49	Stack heights (PSD, TRMP)	Y	
part 50	Sampling ports and platforms (1-501)	Y	
part 51	Review of continuous monitors, sampling ports, platforms, and source tests (1-501)	Y	
part 54	Submittal of Title V application (2-6-404.1)	Y	
part 55	Submittal of Title IV application (40 CFR 72.30(b)(2))	Y	

**Table IV – D  
 Source-specific Applicable Requirements  
 S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (5/2/01)</b>		
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NO <sub>x</sub> , CO <sub>2</sub> , or O <sub>2</sub>	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – D**  
**Source-specific Applicable Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
1-523.1	Parametric monitor periods of inoperation	Y	
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)</b>		
2-1-501	Monitors	Y	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-304	Tube Cleaning	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 3</b>	<b>Inorganic Gaseous Pollutants – Nitrogen Oxides from Heat Transfer Operations (3/17/82)</b>		
9-3-303	Nitrogen oxide emission limitation	Y	
<b>BAAQMD</b>	<b>Continuous Emission Monitoring Policy and Procedures</b>		

**IV. Source-Specific Applicable Requirements**

**Table IV – D  
 Source-specific Applicable Requirements  
 S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>Manual of Procedures, Volume V</b>	<b>(1/20/82)</b>		
<b>40 CFR 60</b>	<b>Standards of Performance for New Stationary Sources (12/23/71)</b>	Y	
<b>Subpart A</b>	<b>General Provisions</b>	Y	
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	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/14/79)</b>	Y	
60.42a(a)(1)	Particulate Limit	Y	
60.42a(b)	Opacity Limit	Y	
60.43a(b)(2)	SO2 limit	Y	
60.43a(g)	Averaging (24-hour for Bay Area)	Y	
60.44a(a)(1)	NOx concentration limit	Y	
60.44a(a)(2)	NOx reduction requirement	Y	
60.44a(d)(1)	NOX limit-lbs/MW-hr	Y	
60.46a(a)	Compliance, particulate limitation	Y	
60.46a(b)	Compliance, NOx limitation	Y	
60.46a(c)	Applicability of Limits	Y	
60.47a(f)	Availability of information	Y	
60.47a(o)	Exemption from NOx monitoring for duct burners	Y	
60.48a	Compliance determination procedures and methods	Y	
60.49a(a)	Performance test reports	Y	
60.49a(b)	NOx emission reports	Y	
60.49a(c)	Reports regarding lack of minimum data	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – D  
 Source-specific Applicable Requirements  
 S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
60.49a(d)	Exceedances during emergency conditions	Y	
60.49a(f)	Reports regarding data availability	Y	
60.49a(g)	Signed statements	Y	
60.49a(h)	Opacity exceedance definition	Y	
60.49a(i)	Reports to Administrator (Also required to District)	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (1/27/82)</b>		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
<b>40 CFR Part 72</b>	<b>Title IV – Acid Rain Program</b>	Y	
<b>40 CFR Part 75</b>	<b>Code of Federal Regulations, Continuous Emissions Monitoring</b>	Y	
<b>BAAQMD Condition #17154</b>			
Definitions	Definitions	Y	
part 1	Minimization of emissions during commissioning period (PSD for NOx and CO)	Y	
part 2	Tuning to minimize emissions (PSD for NOx and CO)	Y	
part 3	Installation of SCR system as early as possible (PSD for NOx)	Y	
part 4	Compliance with NOx and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (PSD for NOx and CO)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NOx, CO, and oxygen concentrations (9-9-501, BACT, offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, offsets)	Y	
part 8	Limit on uncontrolled operation during commissioning (offsets)	Y	
part 11	Mass emission rates during commissioning included in annual limits (offsets)	Y	
part 12	Mass emission rates during commissioning (PSD for NOx and CO)	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur content of 0.25 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – D  
 Source-specific Applicable Requirements  
 S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 18	Duct burners shall not be fired unless turbines are in operation (BACT for NO <sub>x</sub> , CO, POC)	Y	
part 19	SCR system requirement (BACT for NO <sub>x</sub> )	Y	
part 22	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 22a	Hourly and heat input rate NO <sub>x</sub> limits (PSD for NO <sub>x</sub> )	Y	
part 22b	NO <sub>x</sub> concentration limit (BACT for NO <sub>x</sub> )	Y	
part 22c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 22d	CO concentration limit (BACT for CO)	Y	
part 22e	Ammonia concentration limit and monitoring (TRMP for NH <sub>3</sub> )	N	
part 22f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 22g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 22h	Hourly and heat-input rate PM <sub>10</sub> limits (BACT for PM <sub>10</sub> )	Y	
part 23	Limits during startup or shutdown (PSD)		
part 25	HRSG designed to accept oxidation catalyst (BACT for CO)		
part 36	Daily Combined Emission Limits for Gas Turbines and HRSGs (CEQA, PSD, BACT)	Y	
part 37	Annual Combined Emission Limits for Gas Turbines and HRSGs (Offsets, cumulative increase, PSD)	Y	
part 38	Facility annual emission limits for toxic air contaminants (TRMP)	Y	
part 39	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 40	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 41	Calculation of emissions and recordkeeping for toxic air contaminants (TRMP)	N	
part 42	Ammonia slip source test (TRMP)	N	
part 43	Source test to determine compliance with parts 22a, b, c, d and f (BACT, offsets)	Y	
part 44	District review of source test procedures (BACT)	Y	
part 45	Initial and biennial source tests for toxic air contaminants (TRMP)	N	
part 46	Submittal of reports (2-6-502)	Y	
part 47	Retention of records for five years (2-6-502)	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – D**  
**Source-specific Applicable Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 48	Notification of violations to District (2-1-403)	Y	
part 49	Stack heights (PSD, TRMP)	Y	
part 50	Sampling ports and platforms (1-501)	Y	
part 51	Review of continuous monitors, sampling ports, platforms, and source tests (1-501)	Y	
part 54	Submittal of Title V application (2-6-404.1)	Y	
part 55	Submittal of Title IV application (40 CFR 72.30(b)(2))	Y	

**Table IV – E**  
**Source-specific Applicable Requirements**  
**S-5, GAS TURBINE #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (11/3/93)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of inoperation	Y	
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – E  
 Source-specific Applicable Requirements  
 S-5, GAS TURBINE #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)</b>		
2-1-501	Monitors	Y	
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 9</b>	<b>Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas Turbines (9/21/94)</b>		
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-301	Emission Limits, General	Y	
9-9-301.3	Emission Limits- Turbines Rated $\geq$ 10 MW w/SCR	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	



#### IV. Source-Specific Applicable Requirements

**Table IV – E**  
**Source-specific Applicable Requirements**  
**S-5, GAS TURBINE #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Manual of Procedures, Volume V</b>	<b>Continuous Emission Monitoring Policy and Procedures (1/20/82)</b>	Y	
<b>40 CFR 60 Subpart A</b>	<b>Standards of Performance for New Stationary Sources (12/23/71)</b> <b>General Provisions</b>	Y	
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	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978 (6/14/79)</b>	Y	
60.42a(a)(1)	Particulate Limit	Y	
60.42a(b)	Opacity Limit	Y	
60.43a(b)(2)	SO2 limit	Y	
60.44a(a)(1)	NOx concentration limit	Y	
60.44a(a)(2)	NOx reduction requirement	Y	
60.44a(d)(1)	NOX limit-lbs/MW-hr	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (1/27/82)</b>		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
60.334(b)(2)	Sulfur and nitrogen content of fuel	Y	
60.335	Test Methods and Procedures	Y	
<b>40 CFR Part 72</b>	<b>Title IV – Acid Rain Program</b>	Y	
<b>40 CFR Part 75</b>	<b>Code of Federal Regulations, Continuous Emissions Monitoring</b>	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – E**  
**Source-specific Applicable Requirements**  
**S-5, GAS TURBINE #3**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
<b>BAAQMD Condition #17154</b>			
Definitions	Definitions	Y	
part 1	Minimization of emissions during commissioning period (PSD for NOx and CO)	Y	
part 2	Tuning to minimize emissions (PSD for NOx and CO)	Y	
part 3	Installation of SCR System as early as possible (PSD for NOx)	Y	
part 4	Compliance with NOx and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (PSD for NOx and CO)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NOx, CO, and oxygen concentrations (9-9-501, BACT, offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, offsets)	Y	
part 10	Limit on uncontrolled operation during commissioning (offsets)	Y	
part 11	Mass emission rates during commissioning included in annual limits (offsets)	Y	
part 12	Mass emission rates during commissioning (PSD for NOx and CO)	Y	
part 13	Startup/shutdown source test (PSD for NOx and CO, offsets)	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur content of 0.25 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 21	SCR System requirement (BACT for NO <sub>x</sub> and CO)	Y	
part 22	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 22a	Hourly and heat-input rate NOx limits (PSD for NOx)	Y	
part 22b	NOx concentration limit (BACT for NO <sub>x</sub> )	Y	
part 22c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 22d	CO concentration limit (BACT for CO)	Y	
part 22e	Ammonia concentration limit and monitoring (TRMP for NH <sub>3</sub> )	N	
part 22f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 22g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 22h	Hourly and heat-input rate PM <sub>10</sub> limits (BACT for PM <sub>10</sub> )	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – E  
 Source-specific Applicable Requirements  
 S-5, GAS TURBINE #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 23	Limits during startup or shutdown (PSD)	Y	
part 24	Turbines may not be in startup mode simultaneously (PSD)	Y	
part 36	Daily Combined Emission Limits for Gas Turbines and HRSGs (CEQA, PSD, BACT)	Y	
part 37	Annual Combined Emission Limits for Gas Turbines and HRSGs (Offsets, cumulative increase, PSD)	Y	
part 38	Annual emission limits for toxic air contaminants for Gas Turbines and HRSGs (TRMP)	N	
part 39	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 40	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 41	Calculation of emissions and recordkeeping for toxic air contaminants (TRMP)	N	
part 42	Ammonia slip source test (TRMP)	N	
part 43	Source test to determine compliance with parts 22a, b, c, d and f (BACT, offsets)	Y	
part 44	District review of source test procedures (BACT)	Y	
part 45	Initial and biennial source tests for toxic air contaminants (TRMP)	N	
part 46	Submittal of reports (2-6-502)	Y	
part 47	Retention of records for five years (2-6-502)	Y	
part 48	Notification of violations to District (2-1-403)	Y	
part 49	Stack heights (PSD, TRMP)	Y	
part 50	Sampling ports and platforms (1-501)	Y	
part 51	Review of continuous monitors, sampling ports, platforms, and source tests (1-501)	Y	
part 54	Submittal of Title V application (2-6-404.1)	Y	
part 55	Submittal of Title IV application (40 CFR 72.30(b)(2))	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – F**  
**Source-specific Applicable Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 1</b>	<b>General Provisions and Definitions (5/2/01)</b>		
1-107	Combination of Emissions	Y	
1-520	Continuous Emission Monitoring	Y	
1-520.1	Monitoring of NOx, CO <sub>2</sub> , or O <sub>2</sub>	Y	
1-520.8	Monitors required per Reg. 2-1-403	Y	
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	approval of plans and specifications	Y	
1-522.2	scheduling requirements	Y	
1-522.3	CEM performance testing	Y	
1-522.4	reporting of inoperative CEMs	Y	
1-522.5	CEM calibration requirements	Y	
1-522.6	CEM accuracy requirements	Y	
1-522.7	emission limit exceedance reporting requirements	N	
1-522.8	monitoring data submittal requirements	Y	
1-522.9	recordkeeping requirements	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.1	Parametric monitor periods of inoperation	Y	
1-523.2	Limits on periods of inoperation	Y	
1-523.3	Reports of Violations	N	
1-523.4	Records	Y	
1-523.5	Maintenance and calibration	N	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
<b>SIP Regulation 1</b>	<b>General Provisions and Definitions (6/28/99)</b>		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.7	Monitor excesses	Y	
1-523	Parametric Monitoring and Recordkeeping Procedures	Y	
1-523.3	Reports of Violations	Y	
<b>BAAQMD Regulation 2, Rule 1</b>	<b>Regulation 2, Rule 1 - Permits, General Requirements (5/2/01)</b>		
2-1-501	Monitors	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – F**  
**Source-specific Applicable Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-304	Tube Cleaning	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
<b>BAAQMD Regulation 9, Rule 3</b>	<b>Inorganic Gaseous Pollutants – Nitrogen Oxides from Heat Transfer Operations (3/17/82)</b>		
9-3-303	Nitrogen oxide emission limitation	Y	
<b>BAAQMD Manual of Procedures, Volume V</b>	<b>Continuous Emission Monitoring Policy and Procedures (1/20/82)</b>		
<b>40 CFR 60</b>	<b>Standards of Performance for New Stationary Sources (12/23/71)</b>	Y	
<b>Subpart A</b>	<b>General Provisions</b>	Y	
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	
<b>Subpart Da</b>	<b>Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September</b>	Y	

#### IV. Source-Specific Applicable Requirements

**Table IV – F**  
**Source-specific Applicable Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
	<b>18, 1978 (6/14/79)</b>		
60.42a(a)(1)	Particulate Limit	Y	
60.42a(b)	Opacity Limit	Y	
60.43a(b)(2)	SO2 limit	Y	
60.43a(g)	Averaging (24-hour for Bay Area)	Y	
60.44a(a)(1)	NOx concentration limit	Y	
60.44a(a)(2)	NOx reduction requirement	Y	
60.44a(d)(1)	NOX limit-lbs/MW-hr	Y	
60.46a(a)	Compliance, particulate limitation	Y	
60.46a(b)	Compliance, NOx limitation	Y	
60.46a(c)	Applicability of Limits	Y	
60.47a(f)	Availability of information	Y	
60.47a(o)	Exemption from NOx monitoring for duct burners	Y	
60.48a	Compliance determination procedures and methods	Y	
60.49a(a)	Performance test reports	Y	
60.49a(b)	NOx emission reports	Y	
60.49a(c)	Reports regarding lack of minimum data	Y	
60.49a(d)	Exceedances during emergency conditions	Y	
60.49a(f)	Reports regarding data availability	Y	
60.49a(g)	Signed statements	Y	
60.49a(h)	Opacity exceedance definition	Y	
60.49a(i)	Reports to Administrator (Also required to District)	Y	
<b>Subpart GG</b>	<b>Standards of Performance for Stationary Gas Turbines (1/27/82)</b>		
60.332(a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
<b>40 CFR Part 72</b>	<b>Title IV – Acid Rain Program</b>	Y	
<b>40 CFR Part 75</b>	<b>Code of Federal Regulations, Continuous Emissions Monitoring</b>	Y	
<b>BAAQMD Condition #17154</b>			
Definitions	Definitions	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV – F  
 Source-specific Applicable Requirements  
 S-6, HEAT RECOVERY STEAM GENERATOR #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 1	Minimization of emissions during commissioning period (PSD for NOx and CO)	Y	
part 2	Tuning to minimize emissions (PSD for NOx and CO)	Y	
part 3	Installation of SCR system as early as possible (PSD for NOx)	Y	
part 4	Compliance with NOx and CO emission limits (BACT, Offsets)	Y	
part 5	Submittal of commissioning plan (PSD for NOx and CO)	Y	
part 6	Continuous emission monitors and recorders for firing hours, fuel flow rates, NOx, CO, and oxygen concentrations (9-9-501, BACT, offsets)	Y	
part 7	Monitors installed prior to first firing (9-9-501, BACT, offsets)	Y	
part 10	Limit on uncontrolled operation during commissioning (offsets)	Y	
part 11	Mass emission rates during commissioning included in annual limits (offsets)	Y	
part 12	Mass emission rates during commissioning (PSD for NOx and CO)	Y	
part 14	Requirement for combustion of natural gas with a maximum sulfur content of 0.25 gr/100 scf (BACT for SO <sub>2</sub> and PM <sub>10</sub> )	Y	
part 15	Hourly heat input limit (PSD for NO <sub>x</sub> )	Y	
part 16	Daily heat input limit (PSD for PM <sub>10</sub> )	Y	
part 17	Annual heat input limit (Offsets)	Y	
part 18	Duct burners shall not be fired unless turbines are in operation (BACT for NO <sub>x</sub> , CO, POC)	Y	
part 21	SCR system requirement (BACT for NO <sub>x</sub> )	Y	
part 22	Emission limits (BACT, PSD, and Toxic Risk Management Policy)	Y	
part 22a	Hourly and heat input rate NOx limits (PSD for NOx)	Y	
part 22b	NOx concentration limit (BACT for NO <sub>x</sub> )	Y	
part 22c	Hourly and heat-input rate CO limits (PSD for CO)	Y	
part 22d	CO concentration limit (BACT for CO)	Y	
part 22e	Ammonia concentration limit and monitoring (TRMP for NH <sub>3</sub> )	N	
part 22f	Hourly and heat-input rate POC limits (BACT for POC)	Y	
part 22g	Hourly and heat-input rate SO <sub>2</sub> limits (BACT for SO <sub>2</sub> )	Y	
part 22h	Hourly and heat-input rate PM <sub>10</sub> limits (BACT for PM <sub>10</sub> )	Y	
part 23	Limits during startup or shutdown (PSD)		
part 25	HRSR designed to accept oxidation catalyst (BACT for CO)		

#### IV. Source-Specific Applicable Requirements

**Table IV – F**  
**Source-specific Applicable Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
part 36	Daily Combined Emission Limits for Gas Turbines and HRSGs (CEQA, PSD, BACT)	Y	
part 37	Annual Combined Emission Limits for Gas Turbines and HRSGs (Offsets, cumulative increase, PSD)	Y	
part 38	Facility annual emission limits for toxic air contaminants (TRMP)	Y	
part 39	Monitoring (1-520.1, 9-9-501, BACT, Offsets, NSPS, PSD, Cumulative Increase)	Y	
part 40	Calculation of emissions and recordkeeping (Offsets, PSD, Cumulative Increase)	Y	
part 41	Calculation of emissions and recordkeeping for toxic air contaminants (TRMP)	N	
part 42	Ammonia slip source test (TRMP)	N	
part 43	Source test to determine compliance with parts 22a, b, c, d and f (BACT, offsets)	Y	
part 44	District review of source test procedures (BACT)	Y	
part 45	Initial and biennial source tests for toxic air contaminants (TRMP)	N	
part 46	Submittal of reports (2-6-502)	Y	
part 47	Retention of records for five years (2-6-502)	Y	
part 48	Notification of violations to District (2-1-403)	Y	
part 49	Stack heights (PSD, TRMP)	Y	
part 50	Sampling ports and platforms (1-501)	Y	
part 51	Review of continuous monitors, sampling ports, platforms, and source tests (1-501)	Y	
part 54	Submittal of Title V application (2-6-404.1)	Y	
part 55	Submittal of Title IV application (40 CFR 72.30(b)(2))	Y	



#### IV. Source-Specific Applicable Requirements

**Table IV-G  
 S-9, COOLING TOWER**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-301	Ringelmann Number 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Condition #17154</b>			
part 58	Maximum Drift Rate and total dissolved solids (Basis: PSD, BACT, cumulative increase)	Y	
part 59	Visual Inspection (Basis: PSD, BACT, cumulative increase)	Y	

**Table IV-H  
 S-10, FIRE PUMP DIESEL ENGINE**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
<b>BAAQMD Regulation 6</b>	<b>Particulate Matter and Visible Emissions (12/19/90)</b>		
6-303.1	Ringelmann Number 2 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-310.3	Heat Transfer Operations	Y	
6-401	Appearance of Emissions	Y	
<b>BAAQMD Regulation 9, Rule 1</b>	<b>Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)</b>		
9-1-301	Limitations on Ground Level Concentrations	Y	

**IV. Source-Specific Applicable Requirements**

**Table IV-H  
 S-10, FIRE PUMP DIESEL ENGINE**

<b>Applicable Requirement</b>	<b>Regulation Title or Description of Requirement</b>	<b>Federally Enforceable (Y/N)</b>	<b>Future Effective Date</b>
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
<b>BAAQMD Condition #17999</b>			
part 1	BAAQMD Regulation 9, Rule 1 and Regulation 6 Applicability (basis: BAAQMD Regulation 9, Rule 1, Regulation 6)	Y	
part 2	Annual Fuel Usage Limit (Basis: TRMP)	Y	
part 3	Unlimited Emergency Use (Basis: BAAQMD Regulation 9-8-330.1)	Y	
part 4	Fuel use counter (Basis: TRMP)	Y	
part 5	Fuel sulfur content limit (Basis: TRMP, TBACT)	Y	
part 6	Recordkeeping (Basis: TRMP)	Y	

## V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply 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.

### Condition #17154 for:

S-1, S-3, & S-5 Gas Turbines, S-2, S-4, & S-6 HRSGs, and S-9 Cooling Tower

### Definitions:

<del>Clock</del> Hour:	Any continuous 60-minute period <del>beginning on the hour.</del>
Calendar Day:	Any continuous 24-hour period beginning at 12:00 AM or 0000 hours.
Year:	Any consecutive twelve-month period of time
Heat Input:	All heat inputs refer to the heat input at the higher heating value (HHV) of the fuel, in BTU/scf.
Rolling 3-hour period:	Any three-hour period that begins on the hour and does not include start-up or shutdown periods.
Firing Hours:	Period of time during which fuel is flowing to a unit, measured in fifteen minute increments.
MM BTU:	million British thermal units
Gas Turbine Start-up Mode:	The lesser of the first 180 minutes of continuous fuel flow to the Gas Turbine after fuel flow is initiated or the period of time from Gas Turbine fuel flow initiation until the Gas Turbine achieves two consecutive CEM data points in compliance with the emission concentration limits of <del>conditions parts</del> <u>conditions parts</u> 22(b) and 22(d).
Gas Turbine Shutdown Mode:	The lesser of the 30-minute period immediately prior to the termination of fuel flow to the Gas Turbine or the period of time from non-compliance with any requirement listed in <del>Conditions parts</del> <u>conditions parts</u> 22(b) through 22(d) until termination of fuel flow to the Gas Turbine.
Specified PAHs:	The polycyclic aromatic hydrocarbons listed below shall be considered <del>to</del> Specified PAHs for these permit conditions. Any emission limits for Specified PAHs refer to the sum of the emissions for all six of the following compounds.

Benzo[a]anthracene  
Benzo[b]fluoranthene

## VI. Permit Conditions

	Benzo[k]fluoranthene Benzo[a]pyrene Dibenzo[a,h]anthracene Indeno[1,2,3-cd]pyrene
Corrected Concentration:	The concentration of any pollutant (generally NO <sub>x</sub> , CO, or NH <sub>3</sub> ) corrected to a standard stack gas oxygen concentration. For emission point P-1 (S-1 Gas Turbine and S-2 HRSG), emission point P-2 (S-3 Gas Turbine and S-4 HRSG), and emission point P-3 (S-5 Gas Turbine and S-6 HRSG) the standard stack gas oxygen concentration is 15% O <sub>2</sub> by volume on a dry basis.
Commissioning Activities:	All testing, adjustment, tuning, and calibration activities recommended by the equipment manufacturers and the DEC construction contractor to insure safe and reliable steady state operation of the gas turbines, heat recovery steam generators, steam turbine, auxiliary boiler, and associated electrical delivery systems.
Commissioning Period:	The Period shall commence when all mechanical, electrical, and control systems are installed and individual system start-up has been completed, or when a gas turbine is first fired, whichever occurs first. The period shall terminate when the plant has completed performance testing, is available for commercial operation, and has initiated sales to the power exchange. The commissioning period shall not exceed 180 days under any circumstances.
Precursor Organic Compounds (POCs):	Any compound of carbon, excluding methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate
CEC CPM:	California Energy Commission Compliance Program Manager
DEC:	Delta Energy Center

### Conditions for the Commissioning Period

1. The owner/operator of the Delta Energy Center (DEC) shall minimize emissions of carbon monoxide and nitrogen oxides from S-1, S-3, & S-5 Gas Turbines and S-2, S-4, & S-6 Heat Recovery Steam Generators (HRSGs) to the maximum extent possible during the commissioning period. [Conditions Parts](#) 1 through 13 shall only apply during the commissioning period as defined above. Unless otherwise indicated, ~~Conditions parts~~ [Conditions parts](#) 14 through 59 shall apply after the commissioning period has ended. (PSD for NO<sub>x</sub> and CO)
2. At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the combustors of S-1, S-3, & S-5 Gas Turbines, and S-2, S-4, & S-6 Heat Recovery Steam Generators, shall be tuned to minimize the emissions of carbon monoxide and nitrogen oxides. (PSD for NO<sub>x</sub> and CO)

## VI. Permit Conditions

3. At the earliest feasible opportunity in accordance with the recommendations of the equipment manufacturers and the construction contractor, the A-1, A-2, and A-3 SCR Systems shall be installed, adjusted, and operated to minimize the emissions nitrogen oxides from S-1, S-3, & S-5 Gas Turbines and S-2, S-4, & S-6 Heat Recovery Steam Generators. (PSD for NO<sub>x</sub> and CO)
4. Coincident with the steady-state operation of A-1, A-2, & A-3 SCR Systems pursuant to ~~conditions~~ parts 3, 8, 9, and 10, the Gas Turbines (S-1, S-3, & S-5) and the HRSGs (S-2, S-4, & S-6) shall comply with the NO<sub>x</sub> emission limitations specified in ~~conditions~~ parts 22(a) and 22(b). (BACT)
5. The owner/operator of the DEC shall submit a plan to the District Permit Services Division and the CEC CPM at least four weeks prior to first firing of S-1, S-3, or S-5 Gas Turbines describing the procedures to be followed during the commissioning of the turbines, HRSGs, and steam turbine. The plan shall include a description of each commissioning activity, the anticipated duration of each activity in hours, and the purpose of the activity. The activities described shall include, but not be limited to, the tuning of the Dry-Low-NO<sub>x</sub> combustors, the installation and operation of the SCR systems and oxidation catalysts, the installation, calibration, and testing of the CO and NO<sub>x</sub> continuous emission monitors, and any activities requiring the firing of the Gas Turbines (S-1, S-3, & S-5) and, HRSGs (S-2, S-4, & S-6), without abatement by their respective SCR Systems. (PSD for NO<sub>x</sub> and CO)
6. During the commissioning period, the owner/operator of the DEC shall demonstrate compliance with ~~conditions~~ parts 8 through 10 and 12 through the use of properly operated and maintained continuous emission monitors and data recorders for the following parameters:
  - firing hours
  - fuel flow rates
  - stack gas nitrogen oxide emission concentrations,
  - stack gas carbon monoxide emission concentrations
  - stack gas oxygen concentrations.

The monitored parameters shall be recorded at least once every 15 minutes (excluding normal calibration periods or when the monitored source is not in operation) for the Gas Turbines (S-1, S-3, & S-5) and HRSGs (S-2, S-4, & S-6). The owner/operator shall use District-approved methods to calculate heat input rates, nitrogen dioxide mass emission rates, carbon monoxide mass emission rates, and NO<sub>x</sub> and CO emission concentrations, summarized for each clock hour and each calendar day. All records shall be retained on site for at least 5 years from the date of entry and made available to District personnel upon request. (BACT, offsets)

7. The District-approved continuous monitors specified in ~~condition~~ part 6 shall be installed,

## VI. Permit Conditions

- calibrated, and operational prior to first firing of the Gas Turbines (S-1, S-3, & S-5) and Heat Recovery Steam Generators (S-2, S-4, & S-6). After first firing of the turbines, the detection range of these continuous emission monitors shall be adjusted as necessary to accurately measure the resulting range of CO and NO<sub>x</sub> emission concentrations. The type, specifications, and location of these monitors shall be subject to District review and approval. (BACT, offsets)
8. The total number of firing hours of S-1 Gas Turbine and S-2 Heat Recovery Steam Generator without abatement of nitrogen oxide emissions by A-1 SCR System shall not exceed 300 hours during the commissioning period. Such operation of S-1 Gas Turbine and S-2 HRSG without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system in place. Upon completion of these activities, the owner/operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 300 firing hours without abatement shall expire. [The owner/operator shall maintain records of unabated firing hours and related commissioning activities in a District-approved log.](#) (PSD for NO<sub>x</sub> and CO)
  9. The total number of firing hours of S-3 Gas Turbine and S-4 Heat Recovery Steam Generator without abatement of nitrogen oxide emissions by A-3 SCR System shall not exceed 300 hours during the commissioning period. Such operation of S-3 Gas Turbine and S-4 HRSG without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system in place. Upon completion of these activities, the owner/operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 300 firing hours without abatement shall expire. [The owner/operator shall maintain records of unabated firing hours and related commissioning activities in a District-approved log.](#) (PSD for NO<sub>x</sub> and CO)
  10. The total number of firing hours of S-5 Gas Turbine and S-6 Heat Recovery Steam Generator without abatement of nitrogen oxide emissions by A-3 SCR System shall not exceed 300 hours during the commissioning period. Such operation of S-3 Gas Turbine and S-4 HRSG without abatement shall be limited to discrete commissioning activities that can only be properly executed without the SCR system in place. Upon completion of these activities, the owner/operator shall provide written notice to the District Permit Services and Enforcement Divisions and the unused balance of the 300 firing hours without abatement shall expire. [The owner/operator shall maintain records of unabated firing hours and related commissioning activities in a District-approved log.](#) (PSD for NO<sub>x</sub> and CO)
  11. The total mass emissions of nitrogen oxides, carbon monoxide, precursor organic compounds, PM<sub>10</sub>, and sulfur dioxide that are emitted by the Gas Turbines (S-1, S-3, & S-5) and Heat Recovery Steam Generators (S-2, S-4, & S-6) during the commissioning period shall accrue towards the consecutive twelve-month emission limitations specified in ~~condition~~ [part 37](#). (offsets)
  12. Combined pollutant mass emissions from the Gas Turbines (S-1, S-3, & S-5) and Heat

## VI. Permit Conditions

Recovery Steam Generators (S-2, S-4, & S-6) shall not exceed the following limits during the commissioning period. These emission limits shall include emissions resulting from the start-up and shutdown of the Gas Turbines (S-1, S-3, & S-5). (PSD for NO<sub>x</sub> and CO)

NO <sub>x</sub> (as NO <sub>2</sub> )	5,266 pounds per calendar day	400.4 pounds per hour
CO	16,272 pounds per calendar day	1,192 pounds per hour
POC (as CH <sub>4</sub> )	686 pounds per calendar day	
PM <sub>10</sub>	756 pounds per calendar day	
SO <sub>2</sub>	82.5 pounds per calendar day	

13. Prior to the end of the Commissioning Period, the Owner/Operator shall conduct a District and CEC approved source test using external continuous emission monitors to determine compliance with [condition part 23](#). The source test shall determine NO<sub>x</sub>, CO, and POC emissions during start-up and shutdown of the gas turbines. The POC emissions shall be analyzed for methane and ethane to account for the presence of unburned natural gas. The source test shall include a minimum of three start-up and three shutdown periods. Twenty calendar days before the execution of the source tests, the Owner/Operator shall submit to the District and the CEC Compliance Program Manager (CPM) a detailed source test plan designed to satisfy the requirements of this condition. The District and the CEC CPM will notify the Owner/Operator of any necessary modifications to the plan within 20 working days of receipt of the plan; otherwise, the plan shall be deemed approved. The Owner/Operator shall incorporate the District and CEC CPM comments into the test plan. The Owner/Operator shall notify the District and the CEC CPM within seven (7) working days prior to the planned source testing date. Source test results shall be submitted to the District and the CEC CPM within 30 days of the source testing date. (PSD for NO<sub>x</sub> and CO)

### Conditions for the Gas Turbines (S-1, S-3, & S-5) and the Heat Recovery Steam Generators (HRSGs; S-2, S-4, & S-6).

14. The Gas Turbines (S-1, S-3, and S-5) and HRSG Duct Burners (S-2, S-4, and S-6) shall be fired exclusively on natural gas with a maximum sulfur content of 0.25 grain per 100 standard cubic feet. (BACT for SO<sub>2</sub> and PM<sub>10</sub>)
15. The combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2, S-3 & S-4, and S-5 & S-6) shall not exceed 2,125 MM BTU per hour, averaged over any rolling 3-hour period. (PSD for NO<sub>x</sub>)
16. The combined heat input rate to each power train consisting of a Gas Turbine and its associated HRSG (S-1 & S-2 and S-3 & S-4) shall not exceed 50,024 MM BTU per calendar day. (PSD for PM<sub>10</sub>)
17. The combined cumulative heat input rate for the Gas Turbines (S-1, S-3, & S-5) and the HRSGs (S-2, S-4, & S-6) shall not exceed 53,188,532 MM BTU per year. (Offsets)

## VI. Permit Conditions

18. The HRSG duct burners (S-2, S-4, and S-6) shall not be fired unless its associated Gas Turbine (S-1, S-3, and S-5, respectively) is in operation. (BACT for NO<sub>x</sub>)
19. S-1 Gas Turbine and S-2 HRSG shall be abated by the properly operated and properly maintained A-1 Selective Catalytic Reduction (SCR) System whenever fuel is combusted at those sources and the A-1 catalyst bed has reached minimum operating temperature. (BACT for NO<sub>x</sub>)
20. S-3 Gas Turbine and S-4 HRSG shall be abated by the properly operated and properly maintained A-2 Selective Catalytic Reduction (SCR) System whenever fuel is combusted at those sources and the A-2 catalyst bed has reached minimum operating temperature. (BACT for NO<sub>x</sub>)
21. S-5 Gas Turbine and S-6 HRSG shall be abated by the properly operated and properly maintained A-3 Selective Catalytic Reduction (SCR) System whenever fuel is combusted at those sources and the A-3 catalyst bed has reached minimum operating temperature. (BACT for NO<sub>x</sub>)
22. The Gas Turbines (S-1, S-3, & S-5) and HRSGs (S-2, S-4, & S-6) shall comply with requirements (a) through (h) under all operating scenarios, including duct burner firing mode and steam injection power augmentation mode. Requirements (a) through (h) do not apply during a gas turbine start-up or shutdown.  
(BACT, PSD, and Toxic Risk Management Policy)
  - (a) Nitrogen oxide mass emissions (calculated as NO<sub>2</sub>) at P-1 (the combined exhaust point for the S-1 Gas Turbine and the S-2 HRSG after abatement by A-1 SCR System) shall not exceed 19.2 pounds per hour or 0.00904 lb/MM BTU (HHV) of natural gas fired. Nitrogen oxide mass emissions (calculated as NO<sub>2</sub>) at P-2 (the combined exhaust point for the S-3 Gas Turbine and the S-4 HRSG after abatement by A-3 SCR System) shall not exceed 19.2 pounds per hour or 0.00904 lb/MM BTU (HHV) of natural gas fired. Nitrogen oxide mass emissions (calculated as NO<sub>2</sub>) at P-3 (the combined exhaust point for the S-5 Gas Turbine and the S-6 HRSG after abatement by A-3 SCR System) shall not exceed 19.2 pounds per hour or 0.00904 lb/MM BTU (HHV) of natural gas fired. (PSD for NO<sub>x</sub>)
  - (b) The nitrogen oxide emission concentration at emission points P-1, P-2, and P-3 each shall not exceed 2.5 ppmv, on a dry basis, corrected to 15% O<sub>2</sub>, averaged over any 1-hour period. (BACT for NO<sub>x</sub>)
  - (c) Carbon monoxide mass emissions at P-1, P-2, and P-3 each shall not exceed 0.022 lb/MM BTU (HHV) of natural gas fired or 46.75 pounds per hour, averaged over any rolling 3-hour period. If compliance test results or continuous emissions monitoring data indicate that this level cannot be achieved during power steam augmentation operations, the owner/operator may seek approval for a higher CO mass emission limit for this operating



## VI. Permit Conditions

mode, not to exceed 113.7 pounds per hour or 0.0535 lb/MM BTU of natural gas fired. (PSD for CO)

- (d) The carbon monoxide emission concentration at P-1, P-2, and P-3 each shall not exceed 10 ppmv, on a dry basis, corrected to 15% O<sub>2</sub>, averaged over any rolling 3-hour period. If compliance test results or continuous emissions monitoring data indicate that this level cannot be achieved during power steam augmentation operations, the owner/operator may seek approval for a higher CO emission limit for this operating mode, not to exceed 24.3 ppmv, on a dry basis, corrected to 15% O<sub>2</sub>, averaged over any rolling 3-hour period. (BACT for CO)
- \*(e) Ammonia (NH<sub>3</sub>) emission concentrations at P-1, P-2, and P-3 each shall not exceed 10 ppmv, on a dry basis, corrected to 15% O<sub>2</sub>, averaged over any rolling 3-hour period. This ammonia emission concentration shall be verified by the continuous recording of the ammonia injection rate to A-1, A-2, and A-3 SCR Systems. The correlation between the gas turbine and HRSG heat input rates, A-1, A-2, and A-3 SCR System ammonia injection rates, and corresponding ammonia emission concentration at emission points P-1, P-2, and P-3 shall be determined in accordance with ~~permit condition~~ part #42. (TRMP for NH<sub>3</sub>)
- (f) Precursor organic compound (POC) mass emissions (as CH<sub>4</sub>) at P-1, P-2, and P-3 each shall not exceed 5.33 pounds per hour or 0.00251 lb/MM BTU of natural gas fired. (BACT)
- (g) Sulfur dioxide (SO<sub>2</sub>) mass emissions at P-1, P-2, and P-3 each shall not exceed 1.49 pounds per hour or 0.0007 lb/MM BTU of natural gas fired. (BACT)
- (h) Particulate matter (PM<sub>10</sub>) mass emissions at P-1, P-2, and P-3 each shall not exceed ~~12~~ 9 pounds per hour or 0.00424 lb/MM BTU of natural gas fired. (BACT)

23. The regulated air pollutant mass emission rates from each of the Gas Turbines (S-1, S-3, and S-5) during a start-up or a shutdown shall not exceed the limits established below. (PSD)

	Start-Up (lb/start-up)	Shutdown (lb/shutdown)
Oxides of Nitrogen (as NO <sub>2</sub> )	240	80
Carbon Monoxide (CO)	2,514	902
Precursor Organic Compounds (as CH <sub>4</sub> )	48	16

24. No more than one of the Gas Turbines (S-1, S-3, and S-5) shall be in start-up mode at any one time. (PSD)

25. The heat recovery steam generators (S-2, S-4, & S-6) and associated ducting shall be designed such that an oxidation catalyst can be readily installed and properly operated if

## VI. Permit Conditions

deemed necessary by the APCO to insure compliance with the CO emission rate limitations of [conditions parts 22\(c\) and 22\(d\)](#). (BACT)

### Conditions for Existing Sources

#### ~~(S-67, S-70 & S-73 Gas Turbines and S-68, S-71, & S-74 Waste Heat Boilers)~~

26. ~~Deleted~~ Cumulative combined emissions from the Calpine/Dow Gas Turbines (S-67, S-70, and S-73) and Waste Heat Boilers (S-68, S-71, and S-74), including emissions generated during Gas Turbine Start-ups and Shutdowns shall not exceed the following limits during any consecutive twelve-month period:

54.9 tons of NO<sub>x</sub> (as NO<sub>2</sub>) per year ——— (Offsets) ———

27. ~~Deleted~~

28. ~~Deleted~~ The combined exhaust gas from S-67 Gas Turbine T-1 and S-68 Waste Heat Boiler #1 shall be abated by A-188 Selective Catalytic Reduction System whenever fuel is combusted at S-67 or S-68 and the A-188 catalyst bed has reached minimum operating temperature. (Regulation 9-9-301.3)

29. ~~Deleted~~ The combined exhaust gas from S-70 Gas Turbine T-2 and S-71 Waste Heat Boiler #2 shall be abated by A-189 Selective Catalytic Reduction System whenever fuel is combusted at S-70 or S-71 and the A-189 catalyst bed has reached minimum operating temperature. (Regulation 9-9-301.3)

30. ~~Deleted~~ The combined exhaust gas from S-73 Gas Turbine T-3 and S-74 Waste Heat Boiler #3 shall be abated by A-190 Selective Catalytic Reduction System whenever fuel is combusted at S-73 or S-74 and the A-190 catalyst bed has reached minimum operating temperature. (Regulation 9-9-301.3)

31. ~~Deleted~~ The owner/operator of S-67, S-70, and S-73 Gas Turbines shall perform a source test to determine the NO<sub>x</sub> mass emission rates and the accuracy of the NO<sub>x</sub> CEMs during gas turbine start-ups and shutdowns. If the NO<sub>x</sub> CEMs do not accurately assess emissions during start-ups and/or shutdowns (as determined by APCO), then the District approved source test results for NO<sub>x</sub> mass emissions shall be utilized as an emission factor for the purposes of determining compliance with condition 26(a). (offsets, cumulative increase)

32. ~~Deleted~~ The owner/operator of S-67, S-70, and S-73 Gas Turbines and S-68, S-71, and S-74 Waste Heat Boilers shall perform a District approved source test for NO<sub>x</sub> mass emission rates in lb/hr and lb/MM BTU of natural gas fired at maximum operating rates at least once every 8,000 hours of turbine operation or every three calendar years, whichever comes first. (offsets, cumulative increase)

## VI. Permit Conditions

33. ~~The owner/operator shall demonstrate compliance with conditions 26(a), 26(c), 26(d), and 27 by using properly operated and maintained continuous monitors (during all hours of operation including equipment Start up and Shutdown periods) for all of the following parameters:~~

- ~~(a) Firing Hours and Fuel Flow Rates for each of the following sources: S-67, S-68, S-70, S-71, S-73, and S-74~~
- ~~(b) Oxygen (O<sub>2</sub>) Concentrations and Nitrogen Oxides (NO<sub>x</sub>) Concentrations at each of the following exhaust points: P-67, P-73, and P-79.~~

~~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, the average hourly fuel flow rates, and pollutant emission concentrations.~~

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

- ~~(c) Combined Heat Input Rate for S-67, S-68, S-70, S-71, S-73, and S-74~~
- ~~(d) Corrected NO<sub>x</sub> concentrations, and NO<sub>x</sub> mass emissions (as NO<sub>2</sub>) at each of the following exhaust points: P-67, P-73, and P-79.~~

~~For each source, source grouping, or exhaust point, the owner/operator shall record the parameters specified in conditions 33(c) and 33(d) at least once every 15 minutes (excluding normal calibration periods). As specified below, the owner/operator shall utilize the data specified in 33(c) and 33(d) and the source test results specified in condition 32 to calculate and record the following data:~~

- ~~(e) total combined Heat Input Rate for the previous consecutive twelve month period~~
  - ~~(f) on a monthly basis, the cumulative total NO<sub>x</sub> mass emissions (as NO<sub>2</sub>) for the previous consecutive twelve month period for all six sources (S-67, S-68, S-70, S-71, S-73, and S-74) combined.~~
- ~~(1-520.1, 9-9-501, Offsets)~~

34. Deleted

35. Deleted

36. Total combined emissions from the Gas Turbines, and HRSGs (S-1, S-2, S-3, S-4, S-5, and S-6) including emissions generated during Gas Turbine start-ups and shutdowns, shall not exceed the following limits during any calendar day:

- (a) 2,123.5 pounds of NO<sub>x</sub> (as NO<sub>2</sub>) per day (CEQA)
- (b) 13,204.4 pounds of CO per day (PSD)

## VI. Permit Conditions

- (c) 503.6 pounds of POC (as CH<sub>4</sub>) per day (CEQA)
  - (d) 648 pounds of PM<sub>10</sub> per day (PSD)
  - (e) 105.2 pounds of SO<sub>2</sub> per day (BACT)
37. Cumulative combined emissions from the Gas Turbines, and HRSGs, (S-1, S-2, S-3, S-4, S-5, and S-6) including emissions generated during gas turbine start-ups, and gas turbine shutdowns, shall not exceed the following limits during any consecutive twelve-month period:
- (a) 240.2 tons of NO<sub>x</sub> (as NO<sub>2</sub>) per year (Offsets, PSD)
  - (b) 1,105.4 tons of CO per year (Cumulative Increase)
  - (c) 64.68 tons of POC (as CH<sub>4</sub>) per year (Offsets)
  - (d) 118.26 tons of PM<sub>10</sub> per year (Offsets, PSD)
  - (e) 18.42 tons of SO<sub>2</sub> per year (Cumulative Increase)
- \*38. The maximum projected annual toxic air contaminant emissions (per [condition part 45](#)) from the Gas Turbines, and HRSGs combined (S-1, S-2, S-3, S-4, S-5, and S-6) shall not exceed the following limits:
- (a) 5,945 pounds of formaldehyde per year
  - (b) 709 pounds of benzene per year
  - (c) 120.5 pounds of Specified polycyclic aromatic hydrocarbons (PAHs) per year
- unless requirement (d) is satisfied:
- (d) The owner/operator shall perform a health risk assessment using the emission rates determined by source test and the most current Bay Area Air Quality Management District approved procedures and unit risk factors in effect at the time of the analysis. This risk analysis shall be submitted to the District and the CEC CPM within 60 days of the source test date. The owner/operator may request that the District and the CEC CPM 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 result in a cancer risk of not more than 1.0 in one million, the District and the CEC CPM may, at their discretion, adjust the carcinogenic compound emission limits listed above. (TRMP)
39. The owner/operator shall demonstrate compliance with [conditions parts 19 through 21, 22\(a\) through 22\(d\), 23, 24, 36\(a\), 36\(b\), 37\(a\), and 37\(b\)](#), [and also the NO<sub>x</sub> emission limits in 40 CFR 60.44a\(a\), 40 CFR 60.44a\(d\), and 40 CFR 60.332\(a\)\(1\)](#) by using properly operated and maintained continuous monitors (during all hours of operation including equipment Start-up and Shutdown periods) for all of the following parameters:
- (a) Firing Hours and Fuel Flow Rates for each of the following sources: S-1 and S-2 combined, S-3 and S-4 combined, and S-5 and S-6 combined.
  - (b) Oxygen (O<sub>2</sub>) Concentrations, Nitrogen Oxides (NO<sub>x</sub>) Concentrations, and Carbon

## VI. Permit Conditions

- Monoxide (CO) Concentrations at each of the following exhaust points: P-1, P-2, and P-3.
- (c) Ammonia injection rate at A-1, A-2, and A-3 SCR Systems
  - (d) Steam injection rate at S-1, S-3, & S-5 Gas Turbine Combustors

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, the average hourly fuel flow rates, and pollutant emission concentrations.

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

- (e) Heat Input Rate for each of the following sources: S-1 and S-2 combined, S-3 and S-4 combined, and S-5 and S-6 combined.
- (f) Corrected NO<sub>x</sub> concentrations, NO<sub>x</sub> mass emissions (as NO<sub>2</sub>), corrected CO concentrations, and CO mass emissions at each of the following exhaust points: P-1, P-2, and P-3.

For each source, source grouping, or exhaust point, the owner/operator shall record the parameters specified in [conditions parts](#) 39(e) and 39(f) at least once every 15 minutes (excluding normal calibration periods). As specified below, the owner/operator shall calculate and record the following data:

- (g) total Heat Input Rate for every clock hour and the average hourly Heat Input Rate for every rolling 3-hour period.
- (h) on an hourly basis, the cumulative total Heat Input Rate for each calendar day for the following: each Gas Turbine and associated HRSG combined and all [eightsix](#) sources (S-1, S-2, S-3, S-4, S-5, & S-6) combined.
- (i) the average NO<sub>x</sub> mass emissions (as NO<sub>2</sub>), CO mass emissions, and corrected NO<sub>x</sub> and CO emission concentrations for every clock hour and for every rolling 3-hour period.
- (j) on an hourly basis, the cumulative total NO<sub>x</sub> mass emissions (as NO<sub>2</sub>) and the cumulative total CO mass emissions, for each calendar day for the following: each Gas Turbine and associated HRSG combined and all eight sources (S-1, S-2, S-3, S-4, S-5, and S-6) combined.
- (k) For each calendar day, the average hourly Heat Input Rates, Corrected NO<sub>x</sub> emission concentrations, NO<sub>x</sub> mass emissions (as NO<sub>2</sub>), corrected CO emission concentrations, and CO mass emissions for each Gas Turbine and associated HRSG combined
- (l) on a daily basis, the cumulative total NO<sub>x</sub> mass emissions (as NO<sub>2</sub>) and cumulative total CO mass emissions, for the previous consecutive twelve month period for all [eightsix](#) sources (S-1, S-2, S-3, S-4, S-5, and S-6) combined.

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

- 40. To demonstrate compliance with [conditions parts](#) 22(f), 22(g), 22(h), 36(c) through 36(e), and

## VI. Permit Conditions

37(c) through 37(e), the owner/operator shall calculate and record on a daily basis, the Precursor Organic Compound (POC) mass emissions, Fine Particulate Matter (PM<sub>10</sub>) mass emissions (including condensable particulate matter), and Sulfur Dioxide (SO<sub>2</sub>) mass emissions from each power train. The owner/operator shall use the actual Heat Input Rates calculated pursuant to [conditionpart](#) 39, actual Gas Turbine Start-up Times, actual Gas Turbine Shutdown Times, and CEC and District-approved emission factors to calculate these emissions. The calculated emissions shall be presented as follows:

- (a) For each calendar day, POC, PM<sub>10</sub>, and SO<sub>2</sub> Emissions shall be summarized for: each power train (Gas Turbine and its respective HRSG combined) and all [eightsix](#) sources (S-1, S-2, S-3, S-4, S-5, and S-6) combined.
  - (b) on a daily basis, the cumulative total POC, PM<sub>10</sub>, and SO<sub>2</sub> mass emissions, for each year for all [eightsix](#) sources (S-1, S-2, S-3, S-4, S-5, and S-6) combined.  
(Offsets, PSD, Cumulative Increase)
- \*41. To demonstrate compliance with [Conditionpart](#) 38, 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 32,912,920 MM BTU/year and the highest emission factor (pounds of pollutant per MM BTU of Heat Input) determined by any source test at any Gas Turbine, and HRSG. (TRMP)
- \*42. Within 60 days of start-up of the DEC, the owner/operator shall conduct a District-approved source test on exhaust point P-1, P-2, or P-3 to determine the corrected ammonia (NH<sub>3</sub>) emission concentration to determine compliance with [conditionpart](#) 22(e). The source test shall determine the correlation between the heat input rates of the gas turbine and associated HRSG, A-1, A-2, or A-3 SCR System ammonia injection rate, and the corresponding NH<sub>3</sub> emission concentration at emission point P-1, P-2, or P-3. The source test shall be conducted over the expected operating range of the turbine and HRSG (including, but not limited to minimum, 70%, 85%, and 100% load) to establish the range of ammonia injection rates necessary to achieve NO<sub>x</sub> emission reductions while maintaining ammonia slip levels. Continuing compliance with [conditionpart](#) 22(e) shall be demonstrated through calculations of corrected ammonia concentrations based upon the source test correlation and continuous records of ammonia injection rate. (TRMP)
43. Within 60 days of start-up of the DEC and on an annual basis thereafter, the owner/operator shall conduct a District-approved source test on exhaust points P-1, P-2, and P-3 while each Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum load (including steam injection power augmentation mode) to determine compliance with [Conditionsparts](#) 22(a), (b), (c), (d), (f), (g), and (h), while each Gas Turbine and associated Heat Recovery Steam Generator are operating at minimum load to determine compliance with [Conditionsparts](#) 22(c) and (d), and to verify the accuracy of the continuous emission monitors required in [conditionpart](#) 39. The owner/operator shall test for (as a minimum): water content, stack gas flow rate, oxygen concentration, precursor organic compound concentration and

## VI. Permit Conditions

mass emissions, nitrogen oxide concentration and mass emissions (as NO<sub>2</sub>), carbon monoxide concentration and mass emissions, sulfur dioxide concentration and mass emissions, methane, ethane, and particulate matter (PM<sub>10</sub>) emissions including condensable particulate matter. (BACT, offsets)

44. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section and the CEC CPM prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements for continuous emission monitors as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section and the CEC CPM in writing of the source test protocols and projected test dates at least 7 days prior to the testing date(s). As indicated above, the Owner/Operator shall measure the contribution of condensable PM (back half) to the total PM<sub>10</sub> emissions. However, the Owner/Operator may propose alternative measuring techniques to measure condensable PM such as the use of a dilution tunnel or other appropriate method used to capture semi-volatile organic compounds. Source test results shall be submitted to the District and the CEC CPM within 60 days of conducting the tests. (BACT)

\*45. Within 60 days of start-up of the DEC and on an biennial basis (once every two years) thereafter, the owner/operator shall conduct a District-approved source test on exhaust point P-1, P-2, or P-3 while the Gas Turbine and associated Heat Recovery Steam Generator are operating at maximum allowable operating rates to demonstrate compliance with [Conditionpart 38](#). Unless the requirements of [conditionpart 45\(b\)](#) 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. (TRMP)

- (a) The owner/operator shall calculate the maximum projected annual emission rate for each pollutant by multiplying the pollutant emission rate (in pounds/MM BTU; determined by source testing) by 53,770,760 MM BTU/year.
- (b) If three consecutive biennial source tests demonstrate that the annual emission rates calculated pursuant to part (a) for any of the compounds listed below are less than the BAAQMD Toxic Risk Management Policy trigger levels shown, then the owner/operator may discontinue future testing for that pollutant:

Benzene	≤	221 pounds/year
Formaldehyde	≤	1,834 pounds/year
Specified PAHs	≤	38 pounds/year

(TRMP)

46. The owner/operator of the DEC shall submit all reports (including, but not limited to 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



## VI. Permit Conditions

Enforcement Division Policies & Procedures Manual. (Regulation 2-6-502)

47. The owner/operator of the DEC 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, emission rates, monitor excesses, breakdowns, etc.), source test and analytical records, natural gas sulfur content analysis results, emission calculation records, records of plant upsets and related incidents. The owner/operator shall make all records and reports available to District and the CEC CPM staff upon request. (Regulation 2-6-501)
48. The owner/operator of the DEC shall notify the District and the CEC CPM of any violations of these permit conditions. Notification shall be submitted in a timely manner, in accordance with all applicable District Rules, Regulations, ~~and~~ the Manual of Procedures, and standard condition I.F. Notwithstanding the notification and reporting requirements given in any District Rule, Regulation, ~~or~~ the Manual of Procedures or standard condition I.F., the owner/operator shall submit written notification (facsimile is acceptable) to the Enforcement Division within 96 hours of the violation of any permit condition. (Regulation 2-1-403)
49. The stack height of emission points P-1, P-2, and P-3 shall each be at least 144 feet above grade level at the stack base. (PSD, TRMP)
50. The Owner/Operator of DEC shall provide adequate stack sampling ports and platforms to enable the performance of source testing. The location and configuration of the stack sampling ports shall be subject to BAAQMD review and approval. (Regulation 1-501)
51. Within 180 days of the issuance of the Authority to Construct for the DEC, the Owner/Operator shall contact the BAAQMD Technical Services Division regarding requirements for the continuous monitors, sampling ports, platforms, and source tests required by conditions parts 42, 43, and 45. All source testing and monitoring shall be conducted in accordance with the BAAQMD Manual of Procedures. (Regulation 1-501)
52. Deleted
53. Deleted
54. ~~Pursuant to BAAQMD Regulation 2, Rule 6, section 404.3, the owner/operator of DEC shall submit an application to the District for a significant modification to the DEC's Federal (Title V) Operating Permit within 12 months of the initial operation of the gas turbines (S-1, S-3, & S-5) or HRSGs (S-2, S-4, & S-6). (Regulation 2-6-404.3)~~
55. Pursuant to 40 CFR Part 72.30(b)(2)(ii) of the Federal Acid Rain Program, the owner/operator of the Delta Energy Center shall submit an application for a Title IV operating permit at least 24 months prior to the initial operation of any of the gas turbines (S-1, S-3, & S-5) or HRSGs (S-2, S-4, & S-6). (Regulation 2, Rule 7)



## VI. Permit Conditions

56. The Delta Energy Center shall comply with the continuous emission monitoring requirements of 40 CFR Part 75. (Regulation 2, Rule 7)
57. The owner/operator shall take monthly samples of the natural gas combusted at the DEC. The samples shall be analyzed for sulfur content using District-approved laboratory methods. The test results shall be retained on site for a minimum of five years from the test date. (cumulative increase)
58. The cooling towers shall be properly installed and maintained to minimize drift losses. The cooling towers shall be equipped with high-efficiency mist eliminators with a maximum guaranteed drift rate of 0.0005%. The maximum total dissolved solids (TDS) measured at the base of the cooling towers or at the point of return to the wastewater facility shall not be higher than 5,233 ppmw (mg/l). The owner/operator shall sample the water at least once per day. (PSD, BACT, cumulative increase)
59. The owner/operator shall perform a visual inspection of the cooling tower drift eliminators at least once per calendar year, and repair or replace any drift eliminator components which are broken or missing. Prior to initial operation of the Delta Energy Center, the owner/operator shall have the cooling tower vendor's field representative inspect the cooling tower drift eliminators and certify that the installation was performed in a satisfactory manner. The CPM may, in years 5 and 15 of cooling tower operation, require the owner/operator to perform a source test to determine the PM<sub>10</sub> emission rate from the cooling tower to verify continued compliance with the vendor-guaranteed drift rate specified in [condition part #58](#). (PSD, BACT, cumulative increase)
60. The Owner/Operator shall submit a Preplanned Abatement Strategy as described in BAAQMD Regulation 4, Air Pollution Episode Plan, within 120 days after issuance of the Title V permit. After the plan has been approved by the APCO, the owner/operator shall keep records of implementation on an event basis. (Basis: BAAQMD Regulation 4)

### Condition #17999 for:

S-10 Fire Pump Diesel Engine

#### Conditions for S-10

1. S-10 Fire Pump Diesel Engine is subject to the requirements of Regulation 9, Rule 1 ("Sulfur Dioxide"), and the requirements of Regulation 6 ("Particulate and Visible Emissions"). The engine may be subject to other District regulations, including Regulation 9, Rule 8 ("NOx and CO from Stationary Internal Combustion Engines") in the future. [Basis: BAAQMD Regulation 9, Rule 1, BAAQMD Regulation 6]
2. S-10 shall burn no more than 2,000 gallons of diesel fuel in any consecutive 12-month

## VI. Permit Conditions

period for the purpose of reliability testing. [Basis: TRMP]

3. S-10 may burn an unlimited amount of diesel fuel for the purpose of providing power for the emergency pumping of water. [Basis: BAAQMD Regulation 9-8-330.1]
4. S-10 shall each be equipped with a non-resettable totalizing counter which records fuel use. [Basis: TRMP]
5. The sulfur content of all diesel fuel combusted at S-10 shall not exceed 0.05% by weight. [Basis: TRMP, TBACT]
6. The following monthly records shall be maintained in a District-approved log for at least 2 years and shall be made available to the District upon request:
  - a) total fuel use for S-10 for the purpose of reliability testing
  - b) total fuel use for S-10 for the purpose of emergency pumping of water
  - c) fuel sulfur content[Basis: TRMP]

## VII. APPLICABLE LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included 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 column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C	CEM
	NSPS 40 CFR 60.44a (a)(1)	Y		0.2 lb/MM BTU except during startup, shutdown, or malfunction	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (a)(2)	Y		2.25 ppmv reduction of NOx	BAAQMD condition #17154, part 39b	C	CEM
NOx	NSPS 40 CFR 60.44a (d)(1)	Y		1.6 lbs/MW-hr	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	NSPS, 40 CFR 60.332 (a)(1)	Y		100 ppmv, @ 15% O <sub>2</sub> , dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
		Y		None	40 CFR 75.10	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 12	Y		400.4 lb/hr for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		5266 lb/day for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		240 lb/turbine during start-up	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		80 lb/turbine during shutdown	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 36a	Y		2123.5 lb/day for turbines and HRSGs combined	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 37a	Y		240.2 ton/yr for turbines and HRSGs combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD condition #17154, part 12	Y		1192 lb/hr for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
CO	BAAQMD condition #17154, part 12	Y		16,272 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22c	Y		0.022 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		0.022 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 22d	Y		10 ppmv @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22d	Y		10 ppmv @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 23	Y		2514 lb/turbine during start-up	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		902 lb/turbine during shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36b	Y		13,204.4 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 37b	Y		1,105.4 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO <sub>2</sub>		Y		None	40 CFR 75.10	C	fuel flow monitor and CO <sub>2</sub> calculation
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
	NSPS 40 CFR 60.43a (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring Requirement (40 CFR 60.334(b)(2)) subsumed by maximum sulfur content requirement for natural gas. See Permit Shield.	N	
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations
SO2	BAAQMD condition #17154, part 12	Y		82.5 lb/day for turbines, and HRSGs combined during commissioning, including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 14	Y		Fuel sulfur content of 0.25 gr/100 scf	BAAQMD condition #17154, part 57	P/M	Fuel testing
SO2	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36e	Y		105.2 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37e	Y		18.42 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O2		N	
PM10	BAAQMD condition #17154, part 12	Y		756 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 22h	Y		9 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
PM10	BAAQMD condition #17154, part 22h	Y		0.00424 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 36d	Y		648 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37d	Y		118.26 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
POC	BAAQMD condition #17154, part 12	Y		686 lb/day (as CH <sub>4</sub> ) for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
POC	BAAQMD condition #17154, part 22f	Y		5.33 lb/hr (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
POC	BAAQMD condition #17154, part 22f	Y		0.00251 lb/MM BTU (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 23	Y		48 lb/turbine during start-up	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 23	Y		16 lb/turbine during shutdown	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36c	Y		503.6 lb/day (as CH4) for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37c	Y		64.68 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
NH3	BAAQMD condition #17154, Part 22e	N		10 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 39c	C	Ammonia injection rate monitor
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Benzene	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – A**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-1, TURBINE #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Specified PAH's	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Heat input limit	BAAQMD condition #17154, part 15	Y		2,125 MM BTU/hr (HHV), 3-hr average for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	Fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 16	Y		50,024 MM BTU/calendar day (HHV), for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 17	Y		53,188,532 MM BTU/yr (HHV) for S-1, S-3, S-5 Turbines and S-2, S-4, S-6 HRSGs combined	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
Unabated firing	BAAQMD condition #17154, part 8	Y		300 hours during commissioning	BAAQMD condition #17154, part 8	P/H	records

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

## VII. Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C	CEM
	NSPS 40 CFR 60.44a (a)(1)	Y		0.2 lb/MM BTU except during startup, shutdown, or malfunction	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (a)(2)	Y		2.25 ppmv reduction of NOx	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (d)(1)	Y		1.6 lbs/MW-hr	BAAQMD condition #17154, part 39b	C	CEM
NOx	NSPS, 40 CFR 60.332 (a)(1)	Y		100 ppmv, @ 15% O2, dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
		Y		None	40 CFR 75.10	C	CEM
NOx	BAAQMD condition #17154, part 12	Y		400.4 lb/hr for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		5266 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
NOx	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36a	Y		2123.5 lb/day for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 37a	Y		240.2 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD condition #17154, part 12	Y		1192 lb/hr for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		16,272 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22c	Y		0.0132 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		0.0132 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36b	Y		13,204.4 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 37b	Y		1,105.4 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO <sub>2</sub>		Y		None	40 CFR 75.10	C	fuel flow monitor and CO <sub>2</sub> calculation
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
	NSPS 40 CFR 60.43a (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring requirement (40 CFR 60.334(b)(2)) subsumed by sulfur content requirement for natural gas. See Permit Shield.	N	
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations
SO2	BAAQMD condition #17154, part 12	Y		82.5 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 14	Y		Fuel sulfur content of 0.25 gr/100 scf	BAAQMD condition #17154, part 57	P/M	Fuel testing
SO2	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36e	Y		105.2 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37e	Y		18.42 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O <sub>2</sub>		N	
PM	NSPS 40 CFR 60.42a(b)	Y		< 20% opacity, 6 minute average, except one six minute period/hr up to 27% opacity		N	
PM10	BAAQMD condition #17154, part 12	Y		756 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22h	Y		9 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22h	Y		0.00424 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 36d	Y		648 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 36	P/D	Records, calculations
	BAAQMD condition #17154, part 37d	Y		118.26 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
POC	BAAQMD condition #17154, part 12	Y		686 lb/day (as CH <sub>4</sub> ) for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
POC	BAAQMD condition #17154, part 22f	Y		5.33 lb/hr (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22f	Y		0.00126 lb/MM BTU (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD condition #17154, part 36c	Y		503.6 lb/day (as CH4) for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37c	Y		64.68 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
NH3	BAAQMD condition #17154, Part 22e	N		10 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 39c	C	Ammonia Injection rate monitor
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Benzene	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Specified PAH's	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - B**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-2, HEAT RECOVERY STEAM GENERATOR #1**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Heat input limit	BAAQMD condition #17154, part 15	Y		2,125 MM BTU/hr (HHV), 3-hr average for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	Fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 16	Y		50,024 MM BTU/calendar day (HHV), for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 17	Y		53,188,532 MM BTU/yr (HHV) for S-1, S-3, S-5 Turbines and S-2, S-4, S-6 HRSGs combined	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
Unabated firing	BAAQMD condition #17154, part 8	Y		300 hours during commissioning	BAAQMD condition #17154, part 8	P/H	records
Prohibited firing	BAAQMD condition #17154, part 18			Duct burner may not be fired if turbine, S-1, is not fired	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C	CEM
	NSPS 40 CFR 60.44a (a)(1)	Y		0.2 lb/MM BTU except during startup, shutdown, or malfunction	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (a)(2)	Y		2.25 ppmv reduction of NOx	BAAQMD condition #17154, part 39b	C	CEM
NOx	NSPS 40 CFR 60.44a (d)(1)	Y		1.6 lbs/MW-hr	BAAQMD condition #17154, part 39b	C	CEM
	NSPS, 40 CFR 60.332 (a)(1)	Y		100 ppmv, @ 15% O2, dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
		Y		None	40 CFR 75.10	C	CEM
NOx	BAAQMD condition #17154, part 12	Y		400.4 lb/hr for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		5266 lb/day for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
NOx	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		240 lb/turbine during start-up	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		80 lb/turbine during shutdown	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD condition #17154, part 36a	Y		2123.5 lb/day for turbines and HRSGs combined	BAAQMD condition #17154, part 39b	C	CEM
NOx	BAAQMD condition #17154, part 37a	Y		240.2 ton/yr for turbines and HRSGs combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 12	Y		1192 lb/hr for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
CO	BAAQMD condition #17154, part 12	Y		16,272 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22c	Y		0.022 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22c	Y		0.022 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 22d	Y		10 ppmv @ 15% O2, dry, for turbine and HRSG combined, 3-hr average, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22d	Y		10 ppmv @ 15% O2, dry, for turbine and HRSG combined, 3-hr average, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 23	Y		2514 lb/turbine during start-up	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		902 lb/turbine during shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36b	Y		13,204.4 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 37b	Y		1,105.4 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO2		Y		None	40 CFR 75.10	C	fuel flow monitor and CO2 calculation

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD 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	
	NSPS 40 CFR 60.43a (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring Requirement (40 CFR 60.334(b)(2)) subsumed by maximum sulfur content requirement for natural gas. See Permit Shield.	N	
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations
SO2	BAAQMD condition #17154, part 12	Y		82.5 lb/day for turbines, and HRSGs combined during commissioning, including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 14	Y		Fuel sulfur content of 0.25 gr/100 scf	BAAQMD condition #17154, part 57	P/M	Fuel testing
SO2	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
SO2	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36e	Y		105.2 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37e	Y		18.42 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O2		N	
PM10	BAAQMD condition #17154, part 12	Y		756 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 22h	Y		9 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
PM10	BAAQMD condition #17154, part 22h	Y		0.00424 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 36d	Y		648 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37d	Y		118.26 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
POC	BAAQMD condition #17154, part 12	Y		686 lb/day (as CH4) for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
POC	BAAQMD condition #17154, part 22f	Y		5.33 lb/hr (as CH4) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD condition #17154, part 22f	Y		0.00251 lb/MM BTU (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 23	Y		48 lb/turbine during start-up	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 23	Y		16 lb/turbine during shutdown	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36c	Y		503.6 lb/day (as CH <sub>4</sub> ) for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37c	Y		64.68 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
NH <sub>3</sub>	BAAQMD condition #17154, Part 22e	N		10 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 39c	C	Ammonia injection rate monitor
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Benzene	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Specified PAH's	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Heat input limit	BAAQMD condition #17154, part 15	Y		2,125 MM BTU/hr (HHV), 3-hr average for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	Fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 16	Y		50,024 MM BTU/calendar day (HHV), for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 17	Y		53,188,532 MM BTU/yr (HHV) for S-1, S-3, S-5 Turbines and S-2, S-4, S-6 HRSGs combined	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – C**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-3, TURBINE #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Unabated firing	BAAQMD condition #17154, part 9	Y		300 hours during commissioning	BAAQMD condition #17154, part 9	P/H	records

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C	CEM
	NSPS 40 CFR 60.44a (a)(1)	Y		0.2 lb/MM BTU except during startup, shutdown, or malfunction	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (a)(2)	Y		2.25 ppmv reduction of NOx	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (d)(1)	Y		1.6 lbs/MW-hr	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	NSPS, 40 CFR 60.332 (a)(1)	Y		100 ppmv, @ 15% O2, dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
		Y		None	40 CFR 75.10	C	CEM
NOx	BAAQMD condition #17154, part 12	Y		400.4 lb/hr for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		5266 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O2, dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36a	Y		2123.5 lb/day for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 37a	Y		240.2 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 12	Y		1192 lb/hr for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		16,272 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22c	Y		0.0132 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		0.0132 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36b	Y		13,204.4 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 37b	Y		1,105.4 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO2		Y		None	40 CFR 75.10	C	fuel flow monitor and CO2 calculation
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	
	NSPS 40 CFR 60.43a (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring requirement (40 CFR 60.334(b)(2)) subsumed by sulfur content requirement for natural gas. See Permit Shield.	N	
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD condition #17154, part 12	Y		82.5 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 14	Y		Fuel sulfur content of 0.25 gr/100 scf	BAAQMD condition #17154, part 57	P/M	Fuel testing
SO2	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36e	Y		105.2 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37e	Y		18.42 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O2		N	
PM	NSPS 40 CFR 60.42a(b)	Y		< 20% opacity, 6 minute average, except one six minute period/hr up to 27% opacity		N	
PM10	BAAQMD condition #17154, part 12	Y		756 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 22h	Y		9 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22h	Y		0.00424 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 36d	Y		648 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 36	P/D	Records, calculations
	BAAQMD condition #17154, part 37d	Y		118.26 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD condition #17154, part 12	Y		686 lb/day (as CH <sub>4</sub> ) for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
POC	BAAQMD condition #17154, part 22f	Y		5.33 lb/hr (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22f	Y		0.00126 lb/MM BTU (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
POC	BAAQMD condition #17154, part 36c	Y		503.6 lb/day (as CH <sub>4</sub> ) for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37c	Y		64.68 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
NH <sub>3</sub>	BAAQMD condition #17154, Part 22e	N		10 ppmv, @ 15% O <sub>2</sub> , dry, averaged over 3 hrs for turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 39c	C	Ammonia Injection rate monitor
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Benzene	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Specified PAH's	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Heat input limit	BAAQMD condition #17154, part 15	Y		2,125 MM BTU/hr (HHV), 3-hr average for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	Fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 16	Y		50,024 MM BTU/calendar day (HHV), for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 17	Y		53,188,532 MM BTU/yr (HHV) for S-1, S-3, S-5 Turbines and S-2, S-4, S-6 HRSGs combined	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - D**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-4, HEAT RECOVERY STEAM GENERATOR #2**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Unabated firing	BAAQMD condition #17154, part 9	Y		300 hours during commissioning	BAAQMD condition #17154, part 9	P/H	records
Prohibited firing	BAAQMD condition #17154, part 18	Y		Duct burner may not be fired if turbine, S-1, is not fired	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O <sub>2</sub> , dry	BAAQMD 9-9-501	C	CEM
	NSPS 40 CFR 60.44a (a)(1)	Y		0.2 lb/MM BTU except during startup, shutdown, or malfunction	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (a)(2)	Y		2.25 ppmv reduction of NO <sub>x</sub>	BAAQMD condition #17154, part 39b	C	CEM
NOx	NSPS 40 CFR 60.44a (d)(1)	Y		1.6 lbs/MW-hr	BAAQMD condition #17154, part 39b	C	CEM



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	NSPS, 40 CFR 60.332 (a)(1)	Y		100 ppmv, @ 15% O <sub>2</sub> , dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
		Y		None	40 CFR 75.10	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 12	Y		400.4 lb/hr for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		5266 lb/day for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		240 lb/turbine during start-up	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		80 lb/turbine during shutdown	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 36a	Y		2123.5 lb/day for turbines and HRSGs combined	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 37a	Y		240.2 ton/yr for turbines and HRSGs combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD condition #17154, part 12	Y		1192 lb/hr for turbines and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
CO	BAAQMD condition #17154, part 12	Y		16,272 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22c	Y		0.022 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		0.022 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 22d	Y		10 ppmv @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22d	Y		10 ppmv @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 23	Y		2514 lb/turbine during start-up	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 23	Y		902 lb/turbine during shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36b	Y		13,204.4 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 39b	C	CEM
CO	BAAQMD condition #17154, part 37b	Y		1,105.4 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO <sub>2</sub>		Y		None	40 CFR 75.10	C	fuel flow monitor and CO <sub>2</sub> calculation
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
	NSPS 40 CFR 60.43a (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring Requirement (40 CFR 60.334(b)(2)) subsumed by maximum sulfur content requirement for natural gas. See Permit Shield.	N	
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations
SO2	BAAQMD condition #17154, part 12	Y		82.5 lb/day for turbines, and HRSGs combined during commissioning, including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 14	Y		Fuel sulfur content of 0.25 gr/100 scf	BAAQMD condition #17154, part 57	P/M	Fuel testing
SO2	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36e	Y		105.2 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37e	Y		18.42 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O2		N	
PM10	BAAQMD condition #17154, part 12	Y		756 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 22h	Y		9 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
PM10	BAAQMD condition #17154, part 22h	Y		0.00424 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 36d	Y		648 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37d	Y		118.26 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
POC	BAAQMD condition #17154, part 12	Y		686 lb/day (as CH <sub>4</sub> ) for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
POC	BAAQMD condition #17154, part 22f	Y		5.33 lb/hr (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
POC	BAAQMD condition #17154, part 22f	Y		0.00251 lb/MM BTU (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 23	Y		48 lb/turbine during start-up	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 23	Y		16 lb/turbine during shutdown	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36c	Y		503.6 lb/day (as CH4) for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37c	Y		64.68 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
NH3	BAAQMD condition #17154, Part 22e	N		10 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 39c	C	Ammonia injection rate monitor
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Benzene	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII – E**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-5, TURBINE #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Specified PAH's	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Heat input limit	BAAQMD condition #17154, part 15	Y		2,125 MM BTU/hr (HHV), 3-hr average for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	Fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 16	Y		50,024 MM BTU/calendar day (HHV), for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 17	Y		53,188,532 MM BTU/yr (HHV) for S-1, S-3, S-5 Turbines and S-2, S-4, S-6 HRSGs combined	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
Unabated firing	BAAQMD condition #17154, part 10	Y		300 hours during commissioning	BAAQMD condition #17154, part 10	P/H	records

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

## VII. Applicable Limits and Compliance Monitoring Requirements

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NOx	BAAQMD 9-9-301.3	Y		9 ppmv @ 15% O2, dry	BAAQMD 9-9-501	C	CEM
	NSPS 40 CFR 60.44a (a)(1)	Y		0.2 lb/MM BTU except during startup, shutdown, or malfunction	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (a)(2)	Y		2.25 ppmv reduction of NOx	BAAQMD condition #17154, part 39b	C	CEM
	NSPS 40 CFR 60.44a (d)(1)	Y		1.6 lbs/MW-hr	BAAQMD condition #17154, part 39b	C	CEM
NOx	NSPS, 40 CFR 60.332 (a)(1)	Y		100 ppmv, @ 15% O2, dry	Monitoring requirement subsumed by monitoring for BACT limit. See Permit Shield.	N	
		Y		None	40 CFR 75.10	C	CEM
NOx	BAAQMD condition #17154, part 12	Y		400.4 lb/hr for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		5266 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22a	Y		19.2 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
NO <sub>x</sub>	BAAQMD condition #17154, part 22a	Y		0.00904 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22b	Y		2.5 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 1-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36a	Y		2123.5 lb/day for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 37a	Y		240.2 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
CO	BAAQMD condition #17154, part 12	Y		1192 lb/hr for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 12	Y		16,272 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	CEM
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		46.75 lb/hr, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22c	Y		0.0132 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load
	BAAQMD condition #17154, part 22c	Y		0.0132 lb/MM BTU, for turbine and HRSG combined, except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 22d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum and minimum load

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22d	Y		10 ppmv, @ 15% O <sub>2</sub> , dry, for turbine and HRSG combined, 3-hr average except during turbine startup or shutdown	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 36b	Y		13,204.4 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 39b	C	CEM
	BAAQMD condition #17154, part 37b	Y		1,105.4 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 39b	C	CEM
CO <sub>2</sub>		Y		None	40 CFR 75.10	C	fuel flow monitor and CO <sub>2</sub> calculation
SO <sub>2</sub>	BAAQMD 9-1-301	Y		GLC <sup>1</sup> of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N	
	BAAQMD 9-1-302	Y		300 ppm (dry)		N	
	NSPS 40 CFR 60.43a (b)(2)			0.2 lb/MM BTU, 24 hr average except during startup, shutdown		N	

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO2	NSPS 40 CFR 60.333(a)	Y		0.015% (vol) @15% O <sub>2</sub> (dry)	Monitoring requirement (40 CFR 60.334(b)(2)) subsumed by sulfur content requirement for natural gas. See Permit Shield.	N	
		Y		None	40 CFR 75.11, 40 CFR 75, Appendix D, part 2.3		Fuel measurements, calculations
SO2	BAAQMD condition #17154, part 12	Y		82.5 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
	BAAQMD condition #17154, part 14	Y		Fuel sulfur content of 0.25 gr/100 scf	BAAQMD condition #17154, part 57	P/M	Fuel testing
SO2	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		1.49 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22g	Y		0.0007 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 36e	Y		105.2 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37e	Y		18.42 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O <sub>2</sub>		N	
PM	NSPS 40 CFR 60.42a(b)	Y		< 20% opacity, 6 minute average, except one six minute period/hr up to 27% opacity		N	
PM10	BAAQMD condition #17154, part 12	Y		756 lb/day for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, part 22h	Y		9 lb/hr, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22h	Y		0.00424 lb/MM BTU, for turbine and HRSG combined	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 36d	Y		648 lb/day for turbines and HRSGs, combined	BAAQMD condition #17154, part 36	P/D	Records, calculations
	BAAQMD condition #17154, part 37d	Y		118.26 ton/yr for turbines and HRSGs, combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
POC	BAAQMD condition #17154, part 12	Y		686 lb/day (as CH <sub>4</sub> ) for turbines, and HRSGs combined during commissioning and including startup and shutdown of turbines	BAAQMD condition #17154, part 6	C	Fuel flow meter, calculations
POC	BAAQMD condition #17154, part 22f	Y		5.33 lb/hr (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load
	BAAQMD condition #17154, part 22f	Y		0.00126 lb/MM BTU (as CH <sub>4</sub> ) for turbine, and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 43	P/A	Source test at maximum load



## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
POC	BAAQMD condition #17154, part 36c	Y		503.6 lb/day (as CH4) for turbines, HRSGs, and boiler combined	BAAQMD condition #17154, part 40	P/D	Records, calculations
	BAAQMD condition #17154, part 37c	Y		64.68 ton/yr for turbines, HRSGs, and boiler combined (includes emissions from commissioning period)	BAAQMD condition #17154, part 40	P/D	Records, calculations
NH3	BAAQMD condition #17154, Part 22e	N		10 ppmv, @ 15% O2, dry, averaged over 3 hrs for turbine and HRSG combined except during turbine startup or shutdown	BAAQMD condition #17154, part 39c	C	Ammonia Injection rate monitor
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
Formaldehyde	BAAQMD condition #17154, part 38a	N		5945 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Benzene	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations
	BAAQMD condition #17154, part 38b	N		709 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Specified PAH's	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 41	P/D	Records, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - F**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-6, HEAT RECOVERY STEAM GENERATOR #3**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD condition #17154, Part 38c	N		120.5 lb/yr for turbine and HRSGs, combined	BAAQMD condition #17154, part 45	P/every two years on P-1, P-2, or P-3	Source test
Heat input limit	BAAQMD condition #17154, part 15	Y		2,125 MM BTU/hr (HHV), 3-hr average for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	Fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 16	Y		50,024 MM BTU/calendar day (HHV), for S-1, Turbine and S-2, HRSG, total	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
	BAAQMD condition #17154, part 17	Y		53,188,532 MM BTU/yr (HHV) for S-1, S-3, S-5 Turbines and S-2, S-4, S-6 HRSGs combined	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations
Unabated firing	BAAQMD condition #17154, part 10	Y		300 hours during commissioning	BAAQMD condition #17154, part 10	P/H	records
Prohibited firing	BAAQMD condition #17154, part 18			Duct burner may not be fired if turbine, S-1, is not fired	BAAQMD condition #17154, part 39a	C	fuel meter, firing monitor, calculations

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - G**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-9, COOLING TOWER**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-301	Y		> Ringelmann No. 1 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O2		N	
Drift Rate	BAAQMD Condition #17154, part 58	Y		0.0005%	BAAQMD Condition #17154, part 59	P	Initial Source Test
Total Dissolved Solids	BAAQMD Condition #17154, part 58	Y		5233 ppmw (mg/l)	BAAQMD Condition #17154, part 58	P/D	Sampling and testing of cooling tower water

**Table VII - H**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-10, FIRE PUMP DIESEL ENGINE**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-303.1	Y		> Ringelmann No. 2 for no more than 3 minutes in any hour		N	
FP	BAAQMD 6-310	Y		0.15 grain/dscf		N	
	BAAQMD 6-310.3	Y		0.15 grain/dscf @ 6% O2		N	

## VII. Applicable Limits and Compliance Monitoring Requirements

**Table VII - H**  
**Applicable Limits and Compliance Monitoring Requirements**  
**S-10, FIRE PUMP DIESEL ENGINE**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Fuel Sulfur Content	BAAQMD Condition #17999, part 5	Y		0.05% by weight	BAAQMD Condition #17999, part 6	P	Fuel Certification Records

## VIII. TEST METHODS

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

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
BAAQMD 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-304	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible Emissions
BAAQMD 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample
BAAQMD 9-3-303	New or Modified Heat Transfer Operation Limits	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling
BAAQMD 9-7-301.1	Performance Standard, NO <sub>x</sub> , Gaseous Fuel	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-7-301.2	Performance Standard, CO, Gaseous Fuel	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
BAAQMD 9-9-301.3	Emission Limits- Turbines Rated ≥ 10 MW w/SCR	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling
<b>NSPS 40 CFR 60</b>		
Subpart Da	Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced after September 18, 1978	
60.42a (a)(1)	Particulate Limit	EPA Method 5, Determination of Particulate Emissions from Stationary Sources

## VIII. Test Methods

**Table VIII  
 Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
60.42a (b)	Opacity Limit	EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources
60.43a (b)(2)	SO2 limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
60.44a (a)(1)	NOX limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	
60.44b (a)(1)(i)	NOx Limit	EPA Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates
Subpart GG	Standards of Performance for Stationary Gas Turbines	
60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (a)	SO2 Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D 1072-80, Standard Method for Total Sulfur in Fuel Gases ASTM D 3031-81, Standard Test Method for Total Sulfur in Natural Gas by Hydrogenation
<b>BAAQMD Condition #17154</b>		
Part 22b	NOx Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 22e	NH3 Limit	BAAQMD Test Procedure ST-1B, Ammonia, Integrated Sampling
Part 22d	CO Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 22f	POC Limit	Test Procedure ARB 100, Procedures for Continuous Gaseous Emission Stack Sampling
Part 22h	PM10 Limit	Test Procedure ARB 5, Determination of Particulate Matter Emissions from Stationary Sources

## VIII. Test Methods

**Table VIII**  
**Test Methods**

<b>Applicable Requirement</b>	<b>Description of Requirement</b>	<b>Acceptable Test Methods</b>
Part 18.6	SO <sub>x</sub> Limit	Test Procedure, MOP Vol.4, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides Integrated Sample

## IX. TITLE IV ACID RAIN PERMIT

Effective September 6, 2001 through September 6, 2006

---

**ISSUED TO:**

Delta Energy Center, LLC  
P. O. Box 551  
Pittsburg, CA 94565

**PLANT SITE LOCATION:**

901 Loveridge Road  
Pittsburg, CA 94565

**ISSUED BY:**

---

Ellen Garvey Air Pollution Control Officer	<u>September 6, 2001</u> Date
---	----------------------------------

---

**Type of Facility:** Power Plant  
**Primary SIC:** 4913  
**Product:** Electricity

**DESIGNATED REPRESENTATIVE:**

**Name:** William Ferguson  
**Title:** VP Western Region Operations  
**Phone:** (925) 252-2075

**ALTERNATE DESIGNATED REPRESENTATIVE:**

**Name:** David Zeiger  
**Title:** Operations Manager  
**Phone:** (925) 252-2066

**ACID RAIN PERMIT CONTENTS**



**IX. Title IV Acid Rain Permit**

- 1) Statement of Basis
- 2) SO<sub>2</sub> allowance allocated under this permit and NO<sub>x</sub> requirements for each affected unit.
- 3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements of conditions.
- 4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1) STATEMENT OF BASIS

**Statutory and regulatory Authorities: In accordance with District Regulation 2, Rule 7 and Titles IV and V of the Clean Air Act, the Bay Area Air Quality Management District issues this permit pursuant to District Rule Regulation 2, Rule 7.**

2) SO<sub>2</sub> ALLOWANCE ALLOCATIONS

	Year	2001	2002	2003	2004	2005
	SO <sub>2</sub> allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-1, Turbine	NO <sub>x</sub> Limit	This unit is not subject to the NO <sub>x</sub> requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.				

	Year	2001	2002	2003	2004	2005
	SO <sub>2</sub> allowances under Table 2 of 40 CFR Part 73	None	None	None	None	None
S-2, Heat Recovery Steam Generator	NO <sub>x</sub> Limit	This unit is not subject to the NO <sub>x</sub> requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.				

	Year	2001	2002	2003	2004	2005
--	------	------	------	------	------	------

**IX. Title IV Acid Rain Permit**

	<b>SO<sub>2</sub> allowances under Table 2 of 40 CFR Part 73</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>
<b>S-3, Turbine</b>	<b>NOx Limit</b>	<b>This unit is not subject to the NOx requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.</b>				

	<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
	<b>SO<sub>2</sub> allowances under Table 2 of 40 CFR Part 73</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>
<b>S-4, Heat Recovery Steam Generator</b>	<b>NOx Limit</b>	<b>This unit is not subject to the NOx requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.</b>				

	<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
	<b>SO<sub>2</sub> allowances under Table 2 of 40 CFR Part 73</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>
<b>S-5, Turbine</b>	<b>NOx Limit</b>	<b>This unit is not subject to the NOx requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.</b>				

	<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
	<b>SO<sub>2</sub> allowances under Table 2 of 40 CFR Part 73</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>	<b>None</b>
<b>S-6, Heat Recovery Steam Generator</b>	<b>NOx Limit</b>	<b>This unit is not subject to the NOx requirements from 40 CFR Part 76 as this unit is not capable of firing on coal.</b>				

3) **COMMENTS, NOTES AND JUSTIFICATIONS**

**None**

## **IX. Title IV Acid Rain Permit**

### 4) PERMIT APPLICATION

**Attached**

**X. PERMIT SHIELD**

**A. Non-applicable Requirements**

None

**B. Subsumed Requirements**

Pursuant to District Regulations 2-6-233.2 and 2-6-409.12, as of the date this permit is issued, the federally enforceable monitoring, recordkeeping, and reporting requirements cited in the following table for the source or group of sources identified at the top of the table[s] are subsumed by the monitoring, recordkeeping, and reporting for more stringent requirements or by a “hybrid” monitoring scheme. The District has determined that compliance with the requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the subsumed monitoring requirements. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the subsumed monitoring requirements cited.

**Table X B - 1  
 Permit Shield for Subsumed Requirements  
 S-1, S-3, S-5 TURBINES  
 S-2, S4, S-6 HEAT RECOVERY STEAM GENERATORS**

<b>Subsumed Requirement Citation</b>	<b>Title or Description</b>	<b>Streamlined Requirements</b>	<b>Title or Description</b>
40 CFR 60.334(b)(2)	Fuel Nitrogen Content monitoring (natural gas)	BAAQMD Condition 17154, part 39	Continuous emission monitoring for 2.5 ppmv limit @ 15% oxygen
40 CFR 60.334(b)(2)	Fuel Sulfur Content monitoring (natural gas)	BAAQMD Condition 17154, part 57	Requirement for exclusive use of natural gas with a maximum sulfur content of 0.25 gr/100 scf with monthly fuel testing
40 CFR 60.334(c)(1)	Periods of excess emissions, NOx	BAAQMD Condition 17154, Part 39	Requirement for continuous emission monitor for NOx

## **XI. GLOSSARY**

### **ACT**

Federal Clean Air Act

### **BAAQMD**

Bay Area Air Quality Management District

### **BACT**

Best Available Control Technology

### **CAA**

The federal Clean Air Act

### **CAAQS**

California Ambient Air Quality Standards

### **CEQA**

California Environmental Quality Act

### **CFR**

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

### **CO**

Carbon Monoxide

### **Cumulative Increase**

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

### **District**

The Bay Area Air Quality Management District

### **EPA**

The federal Environmental Protection Agency.

### **Excluded**

Not subject to any District regulations.

## **XI. Glossary**

### **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), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

### **FP**

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

### **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.

### **Major Facility**

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants 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 Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

### **MOP**

The District's Manual of Procedures.

### **NAAQS**

National Ambient Air Quality Standards

### **NESHAPS**

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63

### **NMHC**

Non-methane Hydrocarbons

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

Oxides of nitrogen.

### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

### **NSR**

## **XI. Glossary**

**New Source Review.** A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and 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 for the emissions from a new or modified source. Applies to emissions of POC, NO<sub>x</sub>, PM<sub>10</sub>, and SO<sub>2</sub>.

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

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

### **POC**

Precursor Organic Compounds

### **PM**

Particulate Matter

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

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

### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those 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.

### **SIP**

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

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

Sulfur dioxide

### **Title V**

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

### **TSP**

## XI. Glossary

Total Suspended Particulate

### VOC

Volatile Organic Compounds

#### Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m <sup>2</sup>	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year



## **XII. APPLICABLE STATE IMPLEMENTATION PLAN**

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

<http://yosemite1.epa.gov/r9/r9sips.nsf/California?ReadForm&Start=1&Count=30&Expand=3.1>

**XIII. TITLE IV APPLICATION**